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John Henry Wright

THE Archaeological Institute, the science of classical philology, and the interests of historical and literary studies in America have suffered a severe loss by the death, November 25, 1908, of Professor John Henry Wright. Born, February 4, 1852, at Urumyah, Persia, where his parents were stationed as missionaries, he came to the United States in his tenth year and entered Dartmouth College seven years later, in 1869. After his graduation, in 1873, he was for three years Assistant Professor of Ancient Languages in what is now the Ohio State University. He then studied for two years at Leipsic, after which he was Associate Professor of Greek at Dartmouth College until 1886, when he became Professor of Classical Philology and Dean of the Collegiate Department at Johns Hopkins University. In 1887 he was called to Harvard University as Professor of Greek, and in 1895 was made Dean of the Graduate School. He was Professor at the American School of Classical Studies at Athens in 1906-1907. He was a Fellow

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of the American Academy of Arts and Sciences, for many years a Councillor of the Archaeological Institute of America and President of the Boston Society, President of the American Philological Association in 1894, Corresponding Member of the Imperial German Archaeological Institute, and was chosen to speak on problems of the history of classical literature at the International Congress of Arts and Sciences held at St. Louis in 1904. The degree of LL.D. was conferred upon him in 1901 by Western Reserve University and Dartmouth College.

His published writings were notable less on account of their quantity, though that was not inconsiderable, than by reason of their scholarly accuracy, their logical mode of presentation, and their literary excellence. Among them may be mentioned, *The Date of Cylon*, *Herondea*, *Studies in Sophocles*, and *The Origin of Plato's Cave*, in different volumes of *Harvard Studies in Classical Philology*. In 1886 he published a translation of Collignon's *Manual of Greek Archaeology*, he edited *A History of All Nations*, in twenty-four volumes, which appeared in 1902, he was one of the chief editors of the *Twentieth Century Text Books*, was Associate Editor of the *Classical Review*, 1888-1906, and of the *Classical Quarterly* from 1907. From 1897 to 1906 he was Editor-in-chief of the *American Journal of Archaeology*, and any excellence this Journal may possess is due in great measure to his patience, tact, and painstaking care, his wide knowledge, critical acumen, and literary taste.

In his intercourse with others, whether his pupils, his contemporaries, or his elders, Professor Wright was always gentle, kindly, and courteous, and, if occasion offered, generous and self-sacrificing. His enthusiasm for scholarship was not of the noisy or spectacular kind, but was whole-souled and all-pervasive. An able administrator, a scholar of wide and accurate learning, a writer and editor of exceptional diligence and ability, a sympathetic and elevating teacher, a man of most lovable disposition, a true and affectionate friend, his loss is felt with a sorrow which varies only in degree of poignancy by all who knew him, and must be mourned by all who have the interests of scholarship at heart.

H. N. F.

TWO ETRUSCAN MIRRORS

1. *A Mirror with Inscriptions, from Fidenae, representing Peleus and Thetis* (Fig. 1). This mirror was bought¹ in 1907 from a dealer in antiquities in Rome, who said that he had found it himself in a grave of the necropolis at Monte

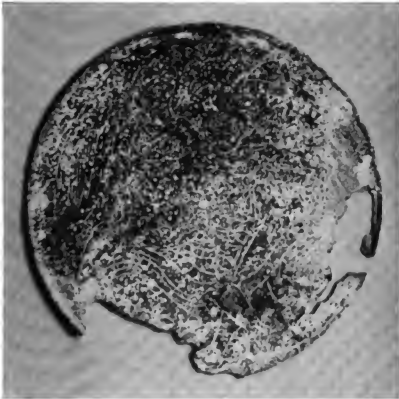


FIGURE 1.—MIRROR FROM FIDENAE, REPRESENTING PELEUS AND THETIS.

Tuffello, near the site of the ancient Fidenae. It is entire, except for two small pieces, which do not include any great or essential part of the scene represented upon it. It is circular²

¹ For the collection of the Latin Department of the University of Pennsylvania, from a sum of money given by Henry H. Bonnell, of the Class of 1880.

² According to Schippke, *Die praenestinschen Spiegel, Abh. aus dem Programm des König-Wilh.-Gym. zu Breslau*, 1888, this form is characteristic of
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and perfectly flat, with a very slightly raised rim; its diameter is 0.142 m. The handle, which is lost, was probably fastened to the mirror and did not form a part of it, as is often the case. There was apparently no tang, such as is often found, to be inserted into a handle of wood, ivory, or other similar material, or for attaching a bronze handle by means of nails; and there are no traces in the mirror itself of the nail holes which are to be seen in some specimens. A discoloration in the proper place seems to indicate where a handle was attached, but it is impossible to say whether this was the original handle or not.¹

The engraving shows one of the scenes in the myth of Peleus and Thetis, the seizure of the goddess by her lover, without other figures of any kind. There is no border, such as is often found on Etruscan mirrors, for example in No. 2. The two participants in the scene are designated by inscriptions, of which one is written from left to right and the other from right to left. Both correspond in the forms of the letters and of the names themselves with the common Etruscan usage (Fig. 2).

Peleus, facing towards the right, has seized Thetis and holds her firmly grasped with both hands by the left arm, just above the wrist and above the elbow. The firmness of his hold is suggested both by his general attitude and by the position of his fingers. He wears a pilæus² and a chlamys, the latter fastened at the neck by a round brooch, and blown back so as to leave his entire body uncovered with the exception of the shoulders and the upper part of the left arm. The position of his legs indicates rapid running, the calf of the right leg being raised so as to form an acute angle with the thigh, while the left is outstretched and passes behind the left leg of the fleeing

Etruscan, and the pear shape of Praenestine mirrors. 'Perfectly round mirrors, without a tang and with a separate handle, seem to be rare.

¹ If attached in the place indicated by the discoloration, the handle would have covered the left foot of Peleus, but this is not unexampled in Etruscan mirrors; see Gerhard, *Etruskische Spiegel*, LI, 2 and 130, 1, and for the cutting off of the feet of figures by the border, XLVIII, 5 and 7 and XLIX, 1.

² I have seen nothing elsewhere like the flap on the side of the pilæus, over the left ear of Peleus. It suggests a helmet rather than a cap, but a helmet would be inappropriate to the rest of the hero's costume, and in the other representations of the scene (Figs. 3, 4, and 5) he clearly wears a pilæus.

goddess. The right foot is obliterated by one of the breaks, but enough of the left remains to show that he is represented as barefooted, as in the representations of the same scene which will be discussed below.

Thetis faces to the front, with her face slightly turned towards her pursuer and with her eyes a little downcast.



FIGURE 2.—DRAWING OF THE MIRROR REPRESENTED IN FIGURE 1.

She is represented with large wings on her shoulders, the significance of which will be spoken of in another connection. The wings are outspread, the left one passing behind and beyond the head of Peleus. The goddess is dressed in a long sleeveless chiton, which is fastened on either shoulder by two round brooches, like the one worn by Peleus, allowing a fold to hang down in front nearly to her waist. Her arms are bare to the shoulder. In spite of the double fold, the upper part of

the robe is represented as transparent, revealing the breasts, which are represented by circles. Since it is hardly possible that only the upper part of the garment should be transparent, to say nothing of the double fold, this seems to be one of the numerous instances in which accuracy in representing costume is sacrificed to artistic effect or convention.¹ As a parallel may be mentioned the representation of Iris in a well-known vase-painting by Brygos, reproduced opposite p. 66 of Miss Abraham's *Greek Dress*. Thetis apparently wears a girdle also, over which the lower part of the chiton is drawn so as to form another fold. There seems to be no indication of more than one garment.

The lower part of the drapery is heavier in appearance and entirely conceals even the outline of the form, but the right leg from the knee down and about half of the left calf are uncovered by the maiden's rapid flight, which is also indicated, rather crudely, by the position of her legs. She wears a head-dress which is marked by incised lines, perhaps to represent a net, and sandals, of which more will be said hereafter. I can see no signs of the earrings which appear in the representation to be next discussed.

The representations of Peleus and Thetis, of which there are many, were classified by B. Graef in the *Jahrbuch* of the German Archaeological Institute, I (1886), pp. 192 ff., where the history and the variations of the myth are also discussed. The representations fall into four general classes: (1) Peleus lying in wait for the goddess or pursuing her; (2) Peleus seizing Thetis, or wrestling with her; (3) Peleus carrying off his prey; (4) the marriage.² In the second and third classes the metamorphoses of the goddess are sometimes indicated by animals of various kinds,—the serpent, lion, panther, and tiger,—alone or in pairs. There are traditions also, and possible representations, of other metamorphoses, one of which will be discussed below.

¹ On the left side there is a confusion of the line of Thetis's body, descending from the arm-pit, with the drapery. The drawing (Fig. 2) represents this exactly as it appears on the mirror.

² This arrangement of classes 1 and 2 seems preferable to that of Graef, since our scene clearly belongs in class 2, but cannot be called a "Ringkampf."

Among the mirrors which represent the various phases of the myth of Peleus and Thetis which are to be found in Gerhard's *Etruskische Spiegel*,¹ two show exactly the same scene as ours. The first of these (Fig. 3), a mirror somewhat larger than ours, No. CCCLXXXVI, is said to have been found in Perugia, but it seems to have been afterwards taken to London. It was supposed for a time that there were two, but both Gerhard and Körte regard the Perugia and the London specimens as identical. Where it is now preserved seems to be unknown. The scene differs from ours in some minor details. In the first place, although the attitude of the figures is the same, Thetis is on the right side and Peleus is on the left, which is also the case in CCCLXXXVII, 1 (Fig. 4). It would seem probable that no great stress is to be laid on this variation, but that it is due to the manner in which Gerhard's illustrations are made, and does not represent the positions of Peleus and Thetis on the mirror itself. This seems clearly to be the opinion of Graef,² who describes both these mirrors in the following words: "Peleus hält die nach *rechts* forteilende geflügelte Thetis am *linken* Arm fest." The inscriptions are the same in the form of the names as those on our mirror, but of course *Thetis* is retrograde, instead of *Pele*, and the forms



FIGURE 3. — THE PERUGIA-LONDON MIRROR; GERHARD, CCCLXXXVI.

¹ These have heretofore, so far as I know, received very little attention.

² *L.c.*, p. 203.

of the letters are different, notably the P, which in our mirror has the usual Etruscan form, but in the others the ordinary Greek form (see Figs. 2, 3, 4). In the Perugia-London mirror the upper part of the garment of Thetis is not transparent, but the lower part shows the outline of the entire left leg. As a whole the execution of our mirror seems to be decidedly superior to that of the other, especially in the expression of Thetis's face, which is rather sweet and pleasing, in the representation of the mouth and lips of Peleus, which are very coarse in the



FIGURE 4. — THE PERUGIA MIRROR;
GERHARD, CCCLXXXVII, 1.

other mirror, as well as in many minor details. Both mirrors have striking defects in common, which are so marked as to make it certain that the two are related, either directly or through a common source. These are especially the hands of the goddess, which are disproportionately long, awkward, and in the Perugia-London specimen claw-like, as well as lifeless. In this respect they present a striking contrast with those of Peleus, which in our mirror are represented literally *ad unguem*, and

as has been said, show a powerful grasp. A further difference between the two mirrors is that Gerhard's has an ivy-leaf border, of a form common, or found with slight variations, in many Etruscan mirrors, with an inner border of scroll-work¹ for rather more than half the circumference. In our mirror there is no trace of either of these borders, but the figures occupy the entire surface. The peculiar knob in Gerhard's mirror on the bottom of Thetis's left sandal is evidently one of the ivy berries, of which a few are represented at the bottom of the mirror only, although unlike the others it is not attached to the stem.² In Gerhard's mirror, and apparently in ours as

¹ The suggestion of G. Conestabile, in *Ann. e Mon.*, 1855, p. 57, that these represent the waves of the sea, seems very doubtful.

² Cf. Gerhard, 140, 1.

well, the sandal on Thetis's left foot is less perfectly made than that on the right foot, and resembles a kind of slipper, while the other is a sandal of the ordinary type, showing the toes. Thetis wears earrings, and she has a headdress of similar appearance to the one in our mirror.

The other mirror (Fig. 4), also published by Gerhard (CCCLXXXVII, 1), is similar in its general features to the one just described, except in the matter of the difference in the sandals of Thetis. It also has the double border, the inner one being the same in form and in extent, while the outer one is of a different and more conventionalized pattern, and is included between lines. This mirror also is said to have been found at Perugia during the construction of a railroad. It is inferior in its execution to the Perugia-London mirror, in some respects having the nature of a caricature, especially in the feature noted by Gerhard and by Graef.¹ The upper part of the drapery of the goddess is transparent, as in our mirror, the breasts being represented in this case by half-circles; but the same is also true of the lower part, as in the Perugia-London specimen. The figures are designated by inscriptions, the P in *Pele* being of the Greek form, while the name of the goddess is misspelled and appears in the form *Thuthisi*.

The latter of Gerhard's two mirrors is regarded as a forgery by Körte, while he considers the former as not free from suspicion. His verdict on the former is pronounced without the assignment of any reason. The latter he says is "sicher gefälscht, . . . beide² scheinen mit der Darstellung gegossen zu sein; die Linien der letzteren sind eigentümlich stumpf."³

This scene has now been noted on four mirrors, and that it was a favorite one is shown also by its appearance as the decoration of an antique representation of a mirror on a lead plate, published in *Ann. e Mon.* I (1855), pp. 55 ff. (Fig. 5). This corresponds in a remarkable degree with the two mirrors published by Gerhard, and in its main features with ours as well.

¹ Grosses Glied des Peleus, Graef, *l.c.*, p. 203.

² Referring not to CCCLXXXVI and CCCLXXXVII, 1, but to the latter and still another mirror representing the same scene, which was also found at Perugia and seems never to have been published.

³ It will be noted that Körte gives satisfactory evidence of falsity only in the case of the unpublished mirror from Perugia.

It has the inner border, beginning and ending exactly where it does on Gerhard's two mirrors, at the end of Thetis's left wing and under her right arm. It will be observed that the relative position of the two figures is the same as in our mirror, which seems to indicate that Gerhard's illustrations show the figures



FIGURE 5.—LEAD PLATE FROM PERUGIA
WITH A REPRESENTATION OF A MIRROR.

reversed. The lower part of the drapery is transparent, but not the upper part. Most striking of all is the difference in the form of Thetis's two sandals, which is characteristic of the Perugia-London mirror, and apparently of ours as well. Although the position of the hands of both Peleus and Thetis is the same in all the mirrors, as well as in this reproduction, their awkwardness is less noticeable in the last named. There is apparently an outer border, as well as the inner one, and it seems to resemble most closely that of Gerhard's.

Perugia mirror, although on account of the small scale it is difficult to assert this positively. The name of Thetis does not appear, but that of Peleus corresponds in the form and in the regularity of the letters with the inscription on our mirror.¹

There seems to be no reasonable doubt that all four² representations are in some way related. On account of its simplicity, its superior workmanship, and above all on account of the lettering of the inscriptions, I am inclined to regard our

¹ This plate also is pronounced a forgery by Körte, but without any presentation of evidence. It was found at Perugia in illicit excavations.

² To which we may add a fifth, the unpublished mirror from Perugia, cited by Körte, which is, however, very likely a forgery.

specimen as the earliest of the mirrors. In any case it furnishes an undoubtedly authentic example of this scene, which, so far as I know, is confined to mirrors.¹

As to Gerhard's two mirrors, there seems to be no good reason for condemning them, unless it be the letters of the inscriptions, which, so far as I am aware, no one has used as an argument. The form of the Π is certainly rare in Etruscan, if it occurs at all, but it might conceivably have been copied from a Greek vase-painting or other work of art. The error in the spelling of Thetis's name in the Perugia specimen is somewhat suspicious; but if the mirror was actually unearthed during the construction of a railroad, it is probably genuine.

It remains only to say a word about the wings of Thetis. Except for these mirrors she is, so far as I know, represented with wings only in Gerhard's No. CCCXCVI and in a vase-cover from Nola (Overbeck, *Gallerie*, Pl. VIII, 4), which is now in the Museum at Naples. In the latter case the wings are small and on the forehead, and seem to be rather a part of the goddess's headdress than of Thetis herself. Gerhard² suggests that they indicate that Thetis was surprised by Peleus in her sleep; but this view, although it is in harmony with some versions of the myth, does not seem very probable. Overbeck³ thinks that they refer to her metamorphoses, while De Witte⁴ considers them to be the wings which were taken from Arce, the sister of Iris, and given to Thetis as a wedding gift by Zeus. The nature of the scene, and the small size of the wings, which this version of the myth says were later attached to the feet of Achilles, make De Witte's explanation the most probable one. If it be rejected on account of the source of the story,⁵ Overbeck's view seems more plausible than that of Gerhard.

Whether these tiny wings on Thetis's headdress are to be

¹ Baumeister, *Denkmäler*, s.v. *Thetis*, p. 1802, attributes the origin of the scene to painting, but without giving reasons for his opinion: "welche alle die Hauptszene des Raubes in abgekürzter Form nach Gemäldemotiven wiedergeben."

² Vol. IV, p. 35, footnote 90.

³ *Gallerie*, p. 188.

⁴ *Ann. d. Inst.*, 1832, p. 117.

⁵ It seems to be found only in Ptol. Hephaist. 6, but finds a place in Roscher's *Lexicon*, s.v. *Arke*.

put in the same class with the large ones represented on the mirrors or not, it seems decidedly probable that the latter refer to her changes of form, especially since Ovid represents her first change, immediately after being seized by her lover, as one into a bird.¹ In a mirror published by Gerhard (CCXXV), which represents Peleus in the act of carrying off his prize, we find a serpent, which clearly refers to the metamorphoses, and in the upper left-hand corner a bird, which Overbeck² refers also to Thetis's changes of form. As the metamorphoses are frequently represented by pairs of animals, this view seems much more probable than that of Gerhard.³

The only possible objection which I have found to the very natural view that the wings which Thetis wears when she is seized by Peleus, refer to her changes of form, is the representation of the goddess with wings in Gerhard's CCCXCVI, where Thetis is designated by an inscription, and where from the nature of the scene⁴ it is not probable that the wings refer to her metamorphoses. Here there are two possibilities: either the wings in this case are those of Arce, or the artist considered the wings which appear in scenes representing the seizure of the goddess, which have been shown to be rather common, as an ordinary attribute of Thetis, and gave them to her in a case where they were inappropriate. It is true that they are too large to be fastened to the feet of Achilles, but the artist may have been led by a desire for symmetry to make them of the same size as those of Thetis's companion. In fact,

¹ *Metam.* XI, 243 ff.:

Sed modo tu volueris; volucrem tamen ille tenebat:
Nunc gravis arbor eras; haerebat in arbore Peleus.
Tertia forma fuit maculosae tigridis; illa
Territus Aeacides a corpore brachia solvit.

² *Gallerie*, p. 206.

³ Since a bird of somewhat similar form appears in CCXCIV and in CDVII, where it is evidently intended for a dove, the symbol of Venus, Gerhard regards the bird in CCXXV also as a dove, symbolical of the approaching union of the pair. But to say nothing of the improbability that the two symbols in CCXXV refer to different things, in the first two mirrors (CCXCIV and CDVII), to which CCCXVII may be added, the bird is at rest, and moreover is turned towards the persons whose love for one another it typifies, while in the last (CCXXV) it is flying away.

⁴ It represents Thetis and Eos begging Zeus for the life of their sons.

this motive alone might be sufficient to account for his representing Thetis with wings. The wings in our scene cannot be explained as those of Arce, since these were not given to Thetis until after her marriage.



FIGURE 6. — MIRROR FROM FESCENNIO OR FALERII.

Until more representations of a winged Thetis are found, where the wings cannot be attributed to her changes of form, or until some other satisfactory explanation of the wings in

scenes prior to her marriage is given, it seems most natural to attribute them to her change into a bird, whatever the origin of that version of the myth may be.

2. *A Mirror from Fescennium or from Falerii* (Fig. 6). This mirror was purchased from the same dealer as No. 1. He said that it had been found by a peasant at Calesto, near Civita Castellana, believed by some to be the site of the ancient Fescennium. I bought the mirror for our collection, not because I felt absolutely certain of the genuineness of the engraving, but because I was convinced of the antiquity of the mirror itself, while its perfect state of preservation made it unusually valuable for illustrative purposes.

This mirror is also round, and very slightly larger than No. 1, having a diameter of 0.152 m. Like the other it is perfectly flat, showing no sign of the convexity which is often found in extant specimens, as well as in representations in works of art.¹ The rim also, which is very pronounced in some specimens, is even less prominent than in No. 1, where, as has been said, it is very slight. The mirror is considerably thicker than No. 1, and is in fact the heaviest that I have ever had the opportunity of examining. It is entire, including the handle, which is 0.115 m. long. The handle is at present fastened to the lower rim of the circular surface, rising above the front² edge in the form of an ornament composed of three conventional leaves. It is fastened on by means of a solder of some kind, without the use of nails, and it is not quite in line with the surface of the mirror. It is unquestionably a mirror-handle, and one very like it is attached to a tang in Gerhard's LX, 4, with the leaves projecting on both sides. Whether the handle originally belonged to this mirror is uncertain, but it seems altogether probable that it did. Whether it was put on in ancient or in modern times it is impossible to say with certainty, but on account of the lack of symmetry referred to, as well as on account of a discoloration around and above the handle, I am inclined to think that it was put on in modern

¹ See for example Gerhard, CCCXVII and CCXLVIII, A. These illustrations show that the convex side was used as the reflecting surface, as does also the fact that the engraving always appears on the concave side.

² The term front is used of the unengraved side, which was polished to serve as a reflecting surface.

times.¹ It is obvious that the mirror never had a tang. The handle is divided into three parts by two ornamented knobs,



FIGURE 7. — DRAWING OF THE MIRROR REPRESENTED IN FIGURE 6.

and it ends, as is often the case, in a ram's head. A similar form of handle appears in Gerhard's XXV, 2 and 14.

The engraving is surrounded by a border, which is included between circular lines, a single one on the outside and a double one on the inside. Although the mirrors published by Gerhard show a great variety of borders, this particular one does not occur, nor have I found anything closely resembling it. That

¹ When a portion of the handle overlaps the surface of a mirror, it is more commonly on the back; see Gerhard, CCXXX, CCLII, CCLXXXVIII, CDXX, 1, and CDXXIII, 2. But as the projection is sometimes found on the front, as in CLX, CCCXXX, and CDVII, and some of the mirrors shown in Pl. XXIII, the fact that in our mirror the leaves are on the front cannot be used as an argument that the handle was put on in modern times. If the leaves had been on the back, they would have covered a portion of the border.

the border, in spite of its simplicity, is unique, would seem to be an argument in favor of its genuineness, and as mirrors with a border, but without pictures, are comparatively rare, of the genuineness of the engraving as a whole.

The scene represents three youths, of whom two are seated, one on each side of a central standing figure. They are nude except for himatia draped about their loins, high shoes, of a somewhat peculiar pattern in the case of the one on the left, and Phrygian caps (Fig. 7). The left foot of the youth on the left is raised, as if it were resting on something, a familiar attitude in groups of this kind,¹ with or without the indication of a support. In this instance, however, the foot is disconnected from the leg, which ends abruptly in the cross line of the shoe-top. In many cases one foot of both seated figures is raised in this way, but in our mirror the youth on the right has both feet together and resting on the ground. He wears shoes of a different pattern from those of his companion, and he has two peculiar streamers falling from his cap upon his left shoulder. Both youths have one hand raised towards their faces, also a common posture in such groups. The one on the right has his left hand and arm stretched out towards his companion, as if he were addressing him; while the right arm of the other, slightly flexed, extends downward by his side, as if the young man were resting his hand on a seat of some kind, of which, however, there is no trace. The two are looking earnestly at each other, as if engaged in conversation, and are apparently paying no attention to the third member of the group.

The central figure stands erect with his arms about the shoulders of the other two, an attitude which I have not observed in other groups of the kind, although in Gerhard, LV, 3, the central figure is embraced in this way by the other two. He is entirely nude, except for high shoes of the same pattern as those of the youth on the left, a crown of seven points, and a necklace composed of five pointed pendants. The crown and the necklace are found on the central figure in several other groups of this kind, both in the case of males and of females, but in no instance of exactly the same form as ours. Shoes of precisely the form of those worn by the central figure and the

¹ See Gerhard, *Etruskische Spiegel*, CCLVI, 1, CCLXIII, etc.

youth on the left do not seem to occur in other mirrors, but somewhat similar ones are to be seen in Gerhard's CCLXIV. The right leg of the standing figure is represented only as far as the beginning of the shoe-top, where it disappears behind the left leg of the seated figure on the left, but does not reappear. The pubes is represented in a peculiar manner.

Although I have found nothing in the published mirrors to which I have had access which exactly corresponds with this scene, groups of three figures in this general position and dress are common enough, with or without other figures and other accessories. In a majority of cases these groups appear to represent scenes in the lives of the Dioscuri or of the so-called Cabeiri, with whom the Dioscuri seem to have been more or less confounded or identified, especially in Etruscan art. In some cases the central figure is a female, and in one mirror published by Gerhard¹ the members of a group of this kind are called by him Castor, Pollux, and Helen. A fourth figure often appears, usually Minerva, as in Gerhard's CCLV, B, where according to the inscriptions we have Castor, Pollux, Minerva, and Iolaus (*File* in Etruscan). Common accessories are a temple in the background, a spear in the hands of one or more of the figures, shields by the side of the seated figures, and the like.

According to one legend there were three Cabeiri, two of whom slew their younger brother, who was afterwards raised from the dead and deified. The murderous attack is shown on a mirror,² where the attacking figures are mature men, represented with wings and with beards, and having no resemblance whatever to the Dioscuri. It seems reasonable enough to refer this scene to the Cabeiri. In Gerhard's LVIII we have an inscribed mirror which shows Castor and Pollux attacking a third youth with murderous intent. The victim, who is not named, is supposed by Gerhard to be Idas or Lynceus, and he believed that on account of such scenes the fratricide attributed to the Cabeiri was transferred to the Dioscuri, or that the Dioscuri were identified with the two fratricidal Cabeiri. The resurrection scene, according to Gerhard, is shown in his LVII, while groups like ours appear to represent the reconciliation of

¹ CCHL.

² Gerhard, CCLV, reproduced in Daremberg and Saglio, *Dict. des Ant.*, p. 770.

the three brothers after the restoration of the third to life. The deification of the younger brother is perhaps indicated by the crown, which frequently appears on the heads of gods and goddesses.

If Gerhard's theory about these groups is accepted, and I have found no positive¹ indication to the contrary, our mirror is one of the Cabeiri series, and is decidedly superior to most of them in artistic merit. If not, it represents some incident in the career of the Dioscuri, who are unmistakably represented in the two seated figures.

After some hesitation I am inclined to regard the engraving as genuine, as the mirror itself unquestionably is. The circumstances of the discovery seem to point to this conclusion, as well as the unique features of the border and of the engraving. Dr. Ludwig Pollak took exception to the crown worn by the central figure, and thought that the engraving had been tampered with; but the crown is clearly a part of the original cutting, and it must be accepted as genuine, unless the whole scene be rejected. Crowns are very frequent on mirrors, and although this one differs from all the others, it is in no way more open to suspicion than numerous other specimens.² Professor Richard Norton, to whom I showed the mirror in Rome, thought that the engraving was done through the patina, but I have been unable to convince myself that this is so. On the contrary, it seems to me that with the aid of a magnifying glass I can detect the patina in, and in some cases across, the lines of the engraving, and this opinion is confirmed by others whom I have consulted.

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¹ Negative indications are the silence of Klügmann and Körte about the Cabeiri and the apparent absence of any reference to Gerhard in Roscher's *Lexicon*, s.v. *Megaloi Theoi*, where he assigns the story of the fratricide to the Macedonian cult. The theory is, I believe, unsupported by any inscriptional evidence, unless the fact that in Gerhard's LVI, 1, Castor and Pollux are represented as attacking a certain Chaluchasu be regarded as such. It is accepted by Daremberg and Saglio, *Dict. des Ant.*, s.v. *Cabiri*, who reproduce several of Gerhard's mirrors. Schippke, *l.c.*, p. 8, is inclined to regard groups like ours as mere "Mantelfiguren."

² See Gerhard, LXXXVIII, CLXIII, CLXV, CLXXXIV, CLXXXVIII, CLXXXX, CCVII, 3 and 4, CCLXXIV, 3, CCLXXVI, 1 and 3, CCLXXVII, 1 and 5, CCCXLVII, CCCXXI, etc.

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THE DEATH OF ROMULUS

ONE of the first results of the new campaign of excavation in the Forum begun in December, 1898, under the skilful leadership of Giacomo Boni was the discovery on January 10, 1899, of that group of monuments which has been called the "Lapis Niger" and the "Grave of Romulus," terms justified by convenience and at present by usage rather than by scientific accuracy. In May of the same year the excavation at this spot was continued, and the so-called Sacellum and the archaic stele were discovered.¹

In the ten years which have since elapsed, a very considerable literature² has grown up concerning this group of monuments, but the prevailing explanation has always been that which first suggested itself, that the group as a whole, or at least a part of it, is the "Grave of Romulus." I do not know, however, of any careful investigation having been made during these last ten years in regard to the whole question of Romulus's death and the legend which grew up concerning it. Nevertheless, such an investigation yields results by no means devoid of interest, and the absence of it has resulted in the placid acceptance of the figure of Romulus in the fifth and even the sixth century B.C.³

¹ For a description of the group, cf. *Not. Scav.* 1899, pp. 151 ff.; Hülsen, *Röm. Mitt.* 1902, pp. 22-31, 1905, pp. 40-46; Vaglieri, *B. Com. Roma*, 1903, pp. 102-143; Studniczka, *Jh. Oest. Arch. I.* IV, 1903, pp. 123-186, VII, 1904, pp. 239-244; Boni, *Atti del Congresso Internazionale delle Scienze Storiche*, pp. 550-554.

² In addition to the literature quoted in the preceding note, cf. Petersen, *Comitum, Rostra, Grab des Romulus*, Rome, 1904; O. Keller, *Jh. Oest. Arch. I.* IV, 1901, *Beiblatt*, pp. 47 ff.; Hülsen, *Beiträge zur alten Gesch. (Klio)* II, 1902, pp. 230 ff.; De Sanctis, *R. Filol.* XXVIII, 1900, pp. 406 ff.

³ Cf. the otherwise able article by O. Keller, *Jh. Oest. Arch. I.* IV, *Beiblatt*, pp. 47 ff., who would place the name of Romulus on the stele whose date precedes the Decemvirate.

It is the purpose of this paper in brief compass to attempt four things: (1) to date the whole legend of Romulus, and to show the lateness of its origin; (2) to sketch in detail the legend of Romulus's death, and to show that this is the latest part of the late legend; (3) to apply the results thus gained to the theory of the "Grave of Romulus," and to show the very slender foundations upon which this theory rests; and (4) to suggest another explanation for this group of monuments.

I. THE LEGEND OF ROMULUS AS A WHOLE

Slender as are our sources for the origin of the legend of Romulus, it is nevertheless possible to arrive at an approximate date. To accomplish this, however, it is necessary to sketch briefly the various stages through which the legend passed.¹

The earliest traces of a legend dealing with the origin of Rome are found about the beginning of the fourth century, and, as is to be expected, among the Greeks and not among the Romans. The legend takes the form of an eponymous heroine Roma (*Ῥωμή*): so Damastes of Sigeion (*circa* 400) and Hellanikos² (end of the fifth century). At about the same time a rival eponymous hero Romos (*Ῥώμος*) arises: so Agathokles of Kyzikos,³ and Antigonos,⁴ the author of the history of southern Italy. During the earlier part of the fourth century these two legends existed side by side. But very early an attempt was made to establish a harmony by considering Romos as the son of Roma.⁵

It was from the Greeks that the Romans received the idea of an eponymous founder, when the legend of Romos arrived in their midst. But in appropriating this foreign idea they acted in characteristically Roman fashion, and placed upon it the stamp of their own individuality. They accepted the idea

¹ For details, cf. my *Romos-Romulus-Remus, eine Prioritätsfrage*, International Historical Congress, Berlin, 1908, soon to be published in full.

² Testimony of both in Dionys. Hal. 1, 72.

³ Festus, p. 260 M.

⁴ *Idem*, p. 266 M.

⁵ Kallias, the historian of Agathokles of Syracuse, in Dionys. Hal. 1, 72; Festus, p. 269; also an anonymous in Plut. *Rom.* 2. Cf. Mommsen, *Hermes*, XVI, 1881, p. 4.

of an eponymous founder, but not the name as transmitted. The eponym must be a name which actually existed among them. Such a name was found in Romulus, which is not a diminutive, but merely the eponym of the gens Romulia.¹ Schulze's contention that the gens Romulia is Etruscan, and that they played a great part in the founding of the city (*urbs*) of Rome as distinguished from the *oppida*, is probably correct, but it has nothing to do with our present discussion. The legend may well have emphasized an historical fact, but for all that it was no less a purely mythical invention and contained nothing which was dependent on direct tradition.

Thus the Greek 'Ρῶμος passed into the Latin Romulus, and the legend enters upon its second stage. But just as we have seen before that the parallel forms 'Ρῶμη and 'Ρῶμος were harmonized, thus the Greek 'Ρῶμος and the Latin Romulus, existing side by side, were in turn both accepted by the Greeks, who made them into brothers 'Ρῶμος and 'Ρωμύλος, whereby, however, 'Ρῶμος continued to play the chief part: so Kallias, Kephalon of Gergis, Demagoras of Samos.²

Thus the legend passes into its third stage, where, although Romos founds the city, his brother Romulus always stands beside him. Incidentally it may be remarked that it is thus that the presence of two founders for Rome is to be explained, and not, as Mommsen would have it, as a legendary prototype for the duality of the consulship. This legendary prototype does exist, but in the persons of Romulus and Titus Tatius, who actually ruled together, whereas Remus died before the city was founded.

The legend of the brothers 'Ρῶμος and 'Ρωμύλος eventually worked its way back to Rome, where, however, the Romans repeated the original process and changed 'Ρῶμος into Remus, not as a linguistic parallel, which is impossible,³ but as a deliberate substitution; and it is probably in connection with this change that the legend of the twins arose.

¹ Concerning the gens Romulia, cf. Holzapfel, *Intorno alla Leggenda di Romulo*, *Atti del Congresso Internaz.* Roma, 1905, 2, pp. 56 ff. Mommsen, *Eph. Epig.* 4, 221; Schulze, *Zur Geschichte der lateinischen Eigennamen*, p. 368.

² Cf. Dionys. Hal. 1, 72; Festus, p. 266.

³ Cf. Schulze, *Zur Geschichte der lateinischen Eigennamen*, p. 219; Kretschmer, *Glotta*, I, pp. 288 ff.

Inasmuch as the earliest reference to Romulus is in a quotation from the Greek Kallias¹ about the year 300, and inasmuch as even the figure of Romos does not appear until about 400 B.C., we are justified in considering that the legend of Romulus developed during the fourth century. Corroboration for this statement may be found in the fact that this was the century when the other great Roman legend, that of Aeneas, was also developing; and that this was the century of Timaios, who may well have been responsible for much of the Romulus legend, as we know that he was for that of Aeneas.² It is quite in accord with this theory that the Ogulnian wolf dates from the year 296 B.C., and that in just about the same period fall the Roman-Campanian coins with the same representation.³

Thus about the year 300, but not much earlier, the legend of the twins was firmly established. Inasmuch as this date differs radically from that commonly accepted, it was necessary to go into the matter somewhat fully.

II. THE LEGEND OF THE DEATH OF ROMULUS

An analysis of the legends connected with Romulus shows that they fall roughly into three great groups: (1) the Romulus-Remus group; (2) the Romulus-Titus Tatius group; (3) the legends of Romulus alone. A further analysis of each of these groups shows that the earliest group was that of Romulus and Remus, which was succeeded by that of Romulus and Titus Tatius, and that the legends of Romulus as a single figure are the latest in origin. It is to this last group, the latest therefore chronologically, that the legends of Romulus's death belong. It is in fact to the third century B.C., rather than to the fourth, that the legend of his death is to be assigned. Our first reference to it is in Ennius:⁴ "Romulus in caelo cum dis genitalibus aevum degit." Accordingly Romulus is thought of as deified, but the exact manner of his death is not told us. There can be

¹ Dionys. Hal. 1, 72; Festus, p. 269.

² Cf. Rossbach, Pauly-Wissowa, s.v. Aineias; Wörner, in Roscher's *Lexikon*, s.v., and *Die Sage von den Wanderungen des Aeneas*, Leipzig, 1882.

³ For the wolf of the Ogulnii, Liv. 10, 23; for the Roman-Campanian coins, Babelon, *Monn. Rom.* I, p. 13; Mommsen, *Hermes*, XVI, 1881, p. 2.

⁴ Frag. 63 Vahlen = Serv. A. 6, 764; Cic. *Tusc. Disp.* 1, 12, 28; Bücheler, *Carm. Epig.* p. 823.

little doubt, however, that he is thought of as having suddenly and mysteriously disappeared, in a word as having been translated. This was the orthodox *schema* for the death of heroes. Thus Aeneas died, and the tradition is at least as old as Cato,¹ thus Latinus,² thus Aventinus.³ Another proof that this was the primitive version may be found in the fact that in this point all the accounts of Romulus's death agree.⁴

In the course of time this simple nucleus grew by the accretion of details. Romulus was holding a review or rather a purification of the army.⁵ This review was localized at a particular spot in the Campus Martius, the Goat-Marsh, Caprae Palus,⁶ near the Pantheon. The very day was identified, the Nones of July, the Nonae Caprotinae,⁷ a choice which may well have been guided by the resemblance between the words Caprae Palus and Caprotinae. Finally, the disappearance was made more reasonable by the accompanying natural phenomena, a heavy thunderstorm, an eclipse of the sun, with consequent sudden darkness.⁸

¹ Cato *ap. Serv. A.* 4, 620; 9, 742; Ovid. *Metam.* 14, 600 ff.; Schol. Bob. p. 256; Juvenal, 11, 63.

² Festus, p. 194; Schol. Bob. in Cic. *Planc.* p. 256.

³ Augustinus, *C. D.* 18, 21.

⁴ Liv. 1, 16: *nec deinde in terris Romulus fuit*; Cic. *de Rep.* 2, 10, 17: *non comparuisset*; Dionys. Hal. 2, 56: ἀφανῆ γενέσθαι; Plut. *Rom.* 27: ἡφανίσθη; Florus, 1, 1, 16: *e conspectu ablatus est*; Solin. 1, 20: *apparere desiit*; Hist. Aug. *vlt. Commod.* 2: *in terris Romulus non apparuit*; Ps. Aurel. *Vict. de vir. ill.* 2, 13: *nusquam comparuit*.

⁵ *cum ad exercitum recensendum contionem haberet*, Liv. 1, 16; cf. Dionys. Hal. 2, 56; Plut. *Rom.* 27; Flor. 1, 1, 16; Ps. Aurel. *Vict. de vir. ill.* 2, 13.

⁶ *in campo ad Caprae paludem*, Liv. 1, 16; cf. Plut. *Rom.* 27; Ovid. *Fast.* 2, 475 ff.; Flor. 1, 1, 16; Solin. 1, 20; Ps. Aurel. *Vict. de vir. ill.* 2, 13. Concerning the site of the Caprae Palus, cf. Jordan-Hülse, *Topographie*, 1, 3, p. 474.

⁷ Cic. *de Rep.* 1, 16, 25: *nonis Quinctilibus*; Plut. *Rom.* 27: νόνας Ἰουλίας = Κυντιλίας; Solin. 1, 20: *nonis Quinctilibus*; Hist. Aug. *vlt. Commod.* 2: *nonarum Iuliarum*; Plut. *de fort. Rom.* 8: νόνας Καπρωτίας. Later the day was confused with the Poplifugia of July 5th (Dionys. Hal. 2, 56; Plut. *Rom.* 29). Schwegler, *Röm. Gesch.* I, p. 532, attempts in vain to unite both festivals. Cf. the criticism of Mommsen, *C.I.L.*, I, Ed. 2, pp. 320, 321.

⁸ Liv. 1, 16: *coorta tempestas cum magno fragore tonitribusque tam denso regem operuit nimbo*; Cic. *de Rep.* 1, 16, 25, who speaks of a defectio solis; Flor. 1, 1, 16; Dionys. Hal. 2, 56; Plut. *Rom.* 27; Plut. *de fort. Rom.* 8; Ovid. *Fast.* 2, 493 ff. Cf. the account of the disappearance of Aeneas in Ps. Aurel. *Vict. de orig. gent. Rom.* 14, 2.

This simple version of the translation of Romulus was, however, unsatisfactory to the rationalistic age which followed hard on the teachings of Ennius. The age which transferred the *lupa* of the twins into the *meretrix*, the gaping chasm of Marcus Curtius into the bog of Mettius Curtius, turned the miraculous disappearance of Romulus into an ordinary human death, nay even into a case of murder with gruesome details added. We are tempted to suspect here the work of Lucius Calpurnius Piso (Consul 133), but direct proof is lacking. Romulus was murdered by the senators, and in order to conceal their deed they tore his body asunder and concealed the *dissecta membra* under their togas.¹ But it was necessary to show a motive for their hatred against him; hence a systematic blackening of his character followed. The slanders covered his whole career from his miserable cheating of Remus at the *auguratio*, through his injustice to Titus Tatius and his indifference at the latter's death, down to his own tyrannical rule and the hated innovation of a bodyguard.²

It was but natural that these theories should overstep themselves and produce a reaction in favor of the older belief in the deification. We have therefore in the last century of the Republic an accentuation of the theory of apotheosis, and a strengthening of it by the identification of Romulus with Quirinus. The earliest references are the coins of Caius Memmius³ (B.C. 60) and the account in Cicero *De Republica*,⁴ a treatise written between B.C. 54 and 51. The identification is always connected with the Proculus-Julius episode,⁵ where the name seems to suggest the influence of the Julian gens; and Cicero's words in the *De Officiis: pace vel Quirini vel Romuli dixerim*,⁶ seem to indicate that as late as B.C. 44, when they were written, the identification was still a comparatively new thing.

¹ Liv. 1, 16: *fuisse credo tum quoque alios qui discertum regem patrum manibus taciti arguerent*; cf. Plut. *Rom.* 27, who adds that the dismemberment took place in the temple of Vulcan; Dionys. Hal. 2, 56; Ovid. *Fast.* 2, 497; Flor. 1, 1, 16; and Cicero's gruesome joke, *ad Att.* 12, 46, 3.

² Dionys. Hal. 2, 56 gives the best account of these accusations.

³ Cf. Babelou, *Monn. Rom.* 2, p. 218; Mommsen, *Münzwesen*, p. 642.

⁴ Cic. *de Rep.* 2, 10, 20.

⁵ For the Proculus-Julius episode, cf. Cic. *de Rep.* 2, 10, 20; Plut. *Rom.* 27; Ovid. *Fast.* 2, 499; Flor. 1, 1, 16; Ps. Aurel. Vict. *de vir. ill.* 2, 13.

⁶ Cic. *de Officiis*, 3, 41. The treatise *De Officiis* was written in B.C. 44.

Whether the Julian gens was responsible for this legend or not, it was Julius and Augustus who made it popular thereafter. Romulus and Quirinus became so absolutely synonymous that the venerable goddess Hora Quirini,¹ one of the oldest figures in Roman religion, was identified with Hersilia, Romulus's legendary wife.²

III. THE SO-CALLED GRAVE OF ROMULUS

Thus we have seen that the Romulus-Remus legend arose in Rome not long before the year 300, that the legends of Romulus's death belong to a still later period, and extend down nearly into the middle of the first century, and that not one of the more common forms of the death legend contains any reference to an ordinary death and burial. It is of course thinkable that a variant legend may have existed, and it is possible, as we shall see below, that we have traces of it, but it is certainly an audacious thing to identify as the grave of Romulus a group of monuments in the centre of the Roman Forum, one part of which, the stele, even at the most conservative estimate dates from B.C. 450, at least half a century before the Romulus legend existed in Rome. Even if the stele be considered as separate from the *sacellum*, the *sacellum* itself may well date from the third, possibly the fourth, century.

Here, however, we must distinguish two things, the actual construction of the whole or a part of this group as a monument to Romulus, which from what we have seen above is manifestly impossible, and the association of some part of this group in the minds of the people of a late day with the name of Romulus. For this later view it is possible that evidence exists, though it is of an extremely slight nature. An analysis of the five passages which are usually quoted in this connection is decidedly rewarding.

(1) Dionysius of Halicarnassus, who was in Rome from B.C. 30 to B.C. 8, tells us (1, 87)³ that the "stone lion which used

¹ Gell. 13, 23, 2; Ennius, frg. 117, Vahlen = Non. p. 120, 2.

² Ovid. *Met.* 14, 829 ff.; cf. Wissowa, *Ges. Abh.* p. 142.

³ Τις δὲ καὶ τὸν λέοντα τὸν λίθινον, ὃς ἔκειτο τῆς ἀγορᾶς τῆς τῶν Ῥωμαίων ἐν τῇ κρατίστῃ [χωρίῳ] παρὰ τοῖς ἐμβόλοις, ἐπὶ τῷ σώματι τοῦ Φαιστούλου τεθῆναι φασιν κτλ.

to stand in the Roman Forum in the most conspicuous part near the Rostra" marks, according to some, the grave of Faustulus.

(2) The same Dionysius (3, 1)¹ tells us that Hostus Hostilius was buried "in the most conspicuous place in the Forum, being honored by a stele which bore an inscription recording his valor."

(3) In Festus,² whose source, Verrius Flaccus, was a contemporary of Dionysius, there is a much mutilated passage from which this much is clear, that the *niger lapis* in the Comitium marks a spot of ill omen, according to some intended for the grave of Romulus, but not used as such — and then follow in some connection the fragments *stulum* and *tilium* which have been reasonably restored as *Faustulum* and *Hostilium*.

(4) The fourth passage is Porphyrio's scholion to Horace's Epodes (16, 13), which closes with the remarkable words: "nam Varro post rostra fuisse sepultum Romulum dicit."³

(5) Lastly comes the relatively worthless Pseudo-Acron⁴ to the same passage, who tells us of two stone lions marking the grave of Romulus, "in rostris," but who does not mention the name of Varro.

At first sight it seems impossible to find a common denominator for these five passages. But the topographical indications render it likely that they are referring to the same spot, certainly to the same general neighborhood; although the monuments are described as (1) a stone lion; (2) a stele; (3) a *niger lapis*; (4) two stone lions; and although three men, Romulus, Faustulus, and Hostilius dispute the right to have been buried there.

So far as Romulus is concerned, however, it is noticeable

¹ (Ὀστίλιος) . . . θάπτεται πρὸς τῶν βασιλέων ἐν τῷ κρατίστῳ τῆς ἀγορᾶς τόπῳ, στήλης ἐπιγραφῇ τῇν ἀρετὴν μαρτυροῦσιν ἀξιοθεῖς.

² Festus, p. 177: *niger lapis* in Comitio locum funestum significat ut ali, Romuli morti destinatum, sed non usu obv . . . *stulum* nutri . . . *tilium* avum ti . . .

³ Hoc sic dicitur, quasi Romulus sepultus sit, non ad caelum raptus aut decerptus. Nam Varro post rostra fuisse sepultum Romulum dicit.

⁴ Plerique aiunt in rostris Romulum sepultum esse et in memoriam huius rei leones duos ibi fuisse, sicut hodieque in sepulcris videmus, atque inde esse ut pro rostris mortui laudarentur. Cf. O. Keller, *Jh. Oest. Arch.* I. IV, 1901, *Beiblatt*, pp. 47 ff.

that Dionysius never refers to him at all, that Festus says merely that some people think the spot was intended for Romulus but never used for him, while Porphyrio's quotation from Varro and the *plerique* of Pseudo-Acron are the only testimonials in his behalf.

It is indeed probable, that somewhere in this part of the Forum a stone lion once stood (Dionysius's one lion far outweighs in authority Pseudo-Acron's two), but, as we shall see below, neither one nor two stood upon the bases of the so-called *sacellum*. It is also possible that the stele which Dionysius attributed to Hostus Hostilius is the same stele which Comendatore Boni has discovered. It would have been absolutely unintelligible to the men of Dionysius's day. But it is scarcely likely that the *niger lapis* which Verrius Flaccus saw is equivalent to or even the predecessor of the *locus lapide nigro stratus* which Boni has laid bare.¹

We have, therefore, at best, the guesses of antiquarians regarding a monument which was destroyed before their day; Varro alone may have seen it, but his statement as quoted to us is the most modest of all, and may be simply the reflection of an aetiological legend which accounted for the custom of holding the funeral orations at the rostra by the supposition that Romulus was buried there.

IV. A SUGGESTED EXPLANATION

It remains to inquire whether we can by any chance identify this group of monuments which has such slight claims to the name "Grave of Romulus." Putting aside for the moment the literary tradition, let us consult the monuments themselves. The group consists of two parts: 1) a stele with an inscription referring in some way to the *rex* (either the real king or his shadow-successor, the *rex sacrorum*) and a *calator*, and coming from a period not later than the Decemvirate; and a broken stone cone whose age cannot be ascertained; 2) the so-called *sacellum*, two bases parallel to each other and abutting at right angles against a rectangular structure. Of the bases them-

¹ Cf. on this point Hülsen, *Röm. Mitt.* XX, 1905, p. 44 and note. Studniczka, *Jh. Oest. Arch.* I. VI, 1903, p. 13, identifies the two phrases. The *lapis niger* of Festus must have been a single black stone, perhaps a meteorite.

selves enough remains to enable them to be restored into the shape of the so-called altar to Aius Locutius on the Palatine, or the altar of Verminius discovered on the Viminal.¹ The rectangular structure against which the bases abut is older than they are, and the bases themselves certainly precede the time of Sulla, and they may date back into the second or third century. Between the bases were found many remnants of burnt sacrifice, and though these remnants were evidently put there as filling, at the time when the whole group was covered up, they doubtless came from the immediate neighborhood, and indicate that burnt sacrifices had taken place there. Turning now to the other evidence, we have first the painstaking researches of Studniczka, who, although he persists in putting lions on the bases, has in other respects succeeded in establishing parallels to prove that the whole so-called *sacellum* is in reality an altar for burnt offering, where the actual sacrifice itself was consumed on the rectangular structure against which the two altars abut.

The two altars were in all probability ornamented above with *pulvinaria*, similarly to the altar on the Palatine,² which would preclude the placing of lions on them.

We have therefore in the neighborhood of the Comitium an altar for burnt sacrifice, and a stele with an inscription referring to the *rex*. Here we may call upon the literary sources and they seem to respond to our appeal.

On two days in the year, March 24³ and May 24,⁴ the calendars designate the quality of the day by the letters Q R C F. These letters are explained by Varro, *L. L.* 6, 31: "Dies qui vocatur sic QUANDO REX COMITIIVIT FAS, is dictus ab eo quod eo die rex sacrificio jus dicat ad comitium ad quod tempus est nefas, ab eo fas; itaque post id tempus lege actum saepe." Accordingly, on at least two occasions in the Roman year, the *rex* or his successor, the *rex sacrorum*, performed a

¹ Photographic reproduction by Hülsen, *Röm. Mitt.* 1905, p. 42. The whole subject of the bases in the *sacellum* and their resemblance to these altars is discussed by Studniczka, *Jh. Oest. Arch.* I. IV, 1903, pp. 123-186.

² Cf. Blinkenberg, *Arch. Studien*, p. 124.

³ March 24th, QRCF *Fast. Vat. Caer.*; Q REX C F *Fast. Maff. Praen.* May 24th, Q R C F *Fast. Esq. Caer. Venus.*; Q REX C F *Fast. Maff.*

⁴ *rex sacrificio ius dicat* Mss.; *rex sacrificiolus litat* Hirschfeld, Jordan.

sacrifice *ad comitium*. But we have traces also of a third occasion, the *Regifugium* of February 24, to which Plutarch seems to refer when he tells us that there was an ancient sacrifice in the Forum near the Comitium, and when the king had sacrificed, he fled quickly from the Forum.¹ We do not know the exact character of these three sacrifices, but that they were of the nature of a purification is rendered probable by the fact that in each case a ceremony of purification occurred on the preceding day; on February 23, the Terminalia; on March 23 and May 23, the Tubilustrium. In connection with the Terminalia one is tempted to think of Janus, that god whom the *rex* served above all others.

If this suggestion be correct, we have the altar for burnt sacrifice at which the *rex* performed certain of his functions, and the stele would be the *lex arae*² with its allusions to the *rex* and the *calator*. With the changes in the Comitium planned by Caesar and carried out by Augustus, the old altar was covered over, and another one on another spot probably substituted for it, but the holiness of the place might well have been marked by some especial pavement, either the black marble at present there or its predecessor.

Finally, it may be added that in all probability the *rex* on the stele refers to the real king and not to his shadow-substitute, the *rex sacrorum*, for if the kingdom extended down into the fifth century, as does not seem unlikely, then even if the stele is as late as the first part of the fifth century, it would still refer to the real king.

JESSE BENEDICT CARTER.

ROME,

December 5, 1908.

¹ *Q. R. ἐστὶ γούν τις ἐν ἀγορᾷ θυσία πρὸς τῷ λεγομένῳ Κομίτιῳ πατριος, ἣν θύσας ὁ βασιλεὺς κατὰ τάχος ἀπεισι φεύγων ἐξ ἀγορᾶς.* Cf. Festus, p. 258.

² Cf. the famous instance of a *lex arae*, that of the temple of Diana on the Aventine, and its imitations, *C.I.L.* III, 1933; XI, 391; XII, 4333.

AN OENOPHORUS BELONGING TO THE JOHNS
HOPKINS UNIVERSITY

AMONG the antiquities recently bought to increase the archaeological collection of the Johns Hopkins University (cf.



FIGURE 1. — OENOPHORUS IN
BALTIMORE.

The Classical Weekly, I, 1908, p. 189 f.) is a vase, the importance of which justifies a separate treatment. It is a two-handled amphora or jar,¹ which was purchased in Rome in 1907. There is no record of its provenience, but probably it was found in or near Rome. The state of preservation is fairly good, though not as perfect as that of a similar vase in the British Museum (cf. Fig. 4 and *Catalogue of the Greek and Etruscan Vases in the British Museum*, IV, p. 267, G 186). The vase has been put together from five pieces. One side (Fig. 1) is now complete, except for a very small piece which is missing from the front of the horse below the left arm of the male figure and a slight break near the bottom which does not interfere with

the moulded representation. From the other side (Fig. 2), however, considerable is lacking—a large part of the shoulder,

¹ The vase is referred to in *Rh. Mus.* LXII, 1907, pp. 551-2.

a piece from the bottom, part of the vine to the left, and a large piece to the right including a bit of the vine, the end of the youth's staff, the lower part of his chlamys, and his left leg from the calf down.

The vase is of reddish brown clay, baked almost to black in some parts, and belongs to the class of red unglazed Roman ware.¹ Its total height is 0.247 m. ($9\frac{3}{4}$ in.); that of the handles 0.063 m. ($2\frac{1}{2}$ in.); that of the field of moulded relief 0.14 m. ($5\frac{1}{2}$ in.). The mouth is uneven and not circular, being 0.05 m. (2 in.) by 0.063 m. ($2\frac{1}{2}$ in.). The diameter at the base is 0.114 m. ($4\frac{1}{2}$ in.); the circumference at the top of the relief is 0.388 m. ($15\frac{1}{4}$ in.), below the relief 0.337 m. ($13\frac{1}{4}$ in.).

On the shoulder is a moulded tongue pattern, as often on similar vases. This pattern suggests the mediaeval and modern godron ornament, although that is convex and not concave. The handles are smooth on the back, but have oblique cross lines on the sides. Under each handle, extending down the sides and separating the two halves of the vase, is an irregular flat band, from 0.015 m. to 0.025 m. in width. On either side of these flat bands and filling the background is a vine with several clusters of grapes. The central part of each side is filled with the moulded representation of a male figure beside a horse. On one side (Fig. 1) a beardless youth stands on the ground, which is represented by a moulding, and rests his weight solidly on his left foot, while his right foot barely touches the ground with the toes. His body is almost in front view, although his head is in profile to right. He is clad in a chlamys, which is fastened over the right shoulder, but leaves the body nude. In his right hand he holds a spear with two barbs of the spear-head showing at the upper end. With his left he holds the bridle of a small horse, whose right fore-leg is raised and whose head is only as high as the youth's shoulder. On the Parthenon frieze we have isocephalism, but here the horse is so much smaller than the standing figure that it seems a mere attribute. On his head the youth wears a conical cap shaped like a half-egg and known as the $\pi\acute{\iota}\lambda\omicron\varsigma$, or

¹ Walters, *History of Ancient Pottery*, II, pp. 549 f.; Blümner, *Technologie und Terminologie der Gewerbe und Künste bei den Griechen und Römern*, II, pp. 65 f.; *Cat. of Gk. and Etr. Vases in Brit. Mus.* IV, pp. 25, 266 f.

pilleus. In front of the youth's head and above the horse's head is a six-pointed star. The scene on the other side (Fig. 2) is the same, except that the youth faces to left, holds the bridle of the horse, whose left fore-foot is raised, with his right hand,



FIGURE 2. — OENOPHORUS IN BALTIMORE.

while his left carries the spear, and rests his weight on his right foot. The attitude of the youth on this side is somewhat similar to that of the bronze figure of one of the Dioscuri from Paramythia, a figure which probably also was leading a horse.¹ But the attitude is still more similar to that of one of the figures on the west frieze of the Parthenon.² In fact, the resemblance is so great that I think it possible that the type goes back originally to this figure in the Parthenon frieze, which had a great influence on contemporary and later art.³ The attitude of the horseman on the vase is, therefore, Greek, but the pilleus is distinctly Roman. Furtwängler, in Roscher's *Lexicon*, s.v. *Dioskuren*, col. 1172, says, "Es ist mir kein Denkmal vorgekommen,

das sicher wesentlich älter als das 3. Jahrh. v. Chr. wäre und die *πίλοι* als Attribut der Dioskuren zeigte."⁴ But on the Polygnotan crater from Orvieto, dating from the middle of the fifth century B.C., the figures which are certainly Castor and Pollux wear a helmet or hat which resembles the pilleus.⁵ This,

¹ *Cat. of the Bronzes in the Brit. Mus.*, No. 277, Pl. VI.

² Michaelis, *Der Parthenon*, Pl. IX, Fig. 9; Brunn-Arndt, Pl. 503.

³ Cf., for example, Pickard, *A.J.A.* II, 1898, pp. 169 f.

⁴ In *Arch. Rel.* X, 1907, p. 328, Furtwängler repeats this statement and says that the *πίλος* was transferred from the Cabeiri to the Dioscuri at this late date.

⁵ Cf. *J.H.S.* X, 1889, p. 118.

to be sure, is not shaped exactly like a half-egg as is the Roman pilæus, but the pilæus shaped like a half-egg does occur on a bronze plaque of the fourth century B.C. from Dodona, which represents Pollux in combat with Lynceus.¹ Furtwängler's observation is, however, true in general, so that we seem to have on our vase a Roman development of a Greek type showing the eclectic tendency of Roman art. Another eclectic type of a Dioscurus was derived from the doryphorus of Polyclitus, which perhaps stood beside a horse, as in the Argos relief.²

That the figures on our vase represent the great horse-taming twin brothers, Castor and Pollux, is evident. The chlamys is associated with them.³ The pilæus is their most distinguishing attribute on coins and vases and sculptured reliefs in and after the third century B.C.⁴ The star (Lucian, *l.c.*) is one of their most frequent symbols, especially on coins.⁵ The horse is the symbol which is oldest and always most closely connected with the Dioscuri.⁶ The horse is associated with the Dioscuri in art as early as the archaic Spartan reliefs described in *Ath. Mitt.* II, 1877, pp. 313, 383 f., and even as early as the amphora of Execias, where Castor is painted standing beside his horse, clad in the chlamys and holding a spear over his left shoulder (*Wiener Vorlegeblätter*, 1888, Pl. VI, 1 a). This association (cf. *Sparta Mus. Cat.* p. 113 f.) continues down to the days of late Roman art when were chiselled the group on the Capitol

¹ Carapanos, *Dodone et ses ruines*, p. 188, Pl. XV.

² *Ath. Mitt.* III, 1878, Pl. XIII; cf. the Roman lamp in Waldstein, *The Argive Heraeum*, II, p. 184, Pl. LXII, 38; the Villa Albani relief, Mahler, *Polyklet und seine Schule*, p. 39; cf. *Boll. Arte*, XI, 1907, pp. 1-15.

³ Cf. Aelian apud Suidas s.v. Διόσκουροι, νεαρίαι μεγάλοι, γυμνοὶ τὰς παρειὰς ἑκάτεροι, ὅμοιοι τὸ εἶδος, καὶ χλαμύδας ἔχοντες ἐπὶ τῶν ὤμων ἐφημμένην ἑκατέραν; cf. Paus. IV, 27, 2 χλαμύδας πορφύρας ἐνδύοντες ἐπὶ τε ἵππων τῶν καλλίστων ὀχομένοιο καὶ ἐπὶ ταῖς κεφαλαῖς πῖλοις, ἐν δὲ ταῖς χερσὶ δόρατα ἔχοντες.

⁴ Cf. Roscher, *Lexicon*, s.v. *Dioskuren*, 1172 g; Daremberg et Saglio, *Dictionnaire*, s.v. *Dioscuri*, pp. 254 f.; *Sparta Mus. Cat.* pp. 113 f.; cf. Lucian, *Dial. Deor.* 26, 1 τοῦ φύου τὸ ἡμίτονον καὶ ἀστήρ ὑπεράνω καὶ ἀκόντιον ἐν τῇ χειρὶ καὶ ἵππος ἑκατέρω λευκός; cf. Paus. *l.c.*

⁵ Roscher, *op. cit.* 1171 f; Daremberg et Saglio, *op. cit.* p. 257 f. The spear is often in their hands (cf. Lucian, *l.c.*; Paus. *l.c.*; Statius, *Theb.* V, 439 *ambo hastile gerunt*).

⁶ Cf. Roscher, *op. cit.* 1172 h; Baumeister, *Denkmäler*, I, p. 451; Daremberg et Saglio, *op. cit.* pp. 253 f.; Pauly-Wissowa, *Realencyclopädie*, s.v. *Dioskuren*, 1091, 1092; Eitrem, *Die göttlichen Zwillinge, passim*.

steps and the figures of the twin Dioscuri tussling with their snow-white steeds which now stand on Monte Cavallo opposite the Quirinal.¹ Representations of the Dioscuri, similar to that on our vase, also occur on other late moulded Roman vases (cf. Déchelette, *Les Vases Céramiques ornés de la Gaule Romaine*, II, p. 81, Nos. 485, 486).

Perhaps, however, the most valuable feature of the vase is the inscription which was cut across the middle of the bottom



FIGURE 3.—BOTTOM OF OENOPHORUS.

before the vase was fired. The inscription consists of one word, *οἰνοφόρος* (Fig. 3).

The letters are irregular, due partly to the baking. The first *omicron* is not completed to the left. The *nu* looks like a *lambda* combined with *iota*. The letters vary in height from that of the *omicron*, 0.007 m., to that of *phi*, 0.015 m. *Iota*, *nu*, and *rho* are 0.01 m. high. The small *omicron*, the form of *phi* extending above and below the line, and the lunated or

cursive *sigma* point to a date certainly not earlier than the third century B.C. How much later the inscription is, it is difficult to say. It might be post-Christian. In the British Museum (Fig. 4)² there is a vase of exactly the same shape and height (9¾ in.) and style. On the shoulder is the same sort of tongue pattern and on the body the same sort of vine with clusters of grapes. On one side (Fig. 4) there is a relief of a Silenus embracing a Maenad, who dances to right. The Silenus, clad in trousers and short chiton, holds a thyrsus in his left hand to which the Maenad extends her left hand around his neck.

¹ Cf. Furtwängler, *Masterpieces*, pp. 95 f., who sees resemblances between these figures and the Parthenon sculptures, and assigns the originals to Phidias and an elder Praxiteles.

² I am indebted to Professor H. B. Walters and Mr. Anderson of the British Museum for this photograph.

She wears a long chiton, leaving the right shoulder bare. She has flowing hair and holds a phiale in her right hand. On the other side is a similar scene, but instead of the Silenus a satyr is represented. This vase is dated on the label "about 200 B.C." A somewhat similar though smaller vase of a slightly different form, but of the same kind of ware, is in the Metropolitan Museum in New York (Figs. 5, 6).¹ The handles are similar, and there is the same tongue pattern on the shoulder and vine with clusters of grapes on the body of the vase. On one side (Fig. 5) is a relief of a male figure in front view, which is nude except for the chlamys fastened over the right shoulder and falling over both shoulders down the back. The right hand is raised over the head and the left holds a spear or thyrsus, resting on the ground. Possibly Dionysus is meant. On the other side (Fig.



FIGURE 4.—VASE IN THE BRITISH MUSEUM.

6) a drunken Silenus is riding an ass to right. He is nude except for a garment about his thighs. His head, in profile to right, is thrown far back and upwards. He rests his right elbow on the back of the ass, and holds over his left shoulder a thyrsus with his left hand. The work is poor and coarse, and the features are so obliterated that they cannot be well reproduced. The label in the Metropolitan Museum dates the vase

¹ Its register number is 06.1021.252. The vase comes from Tarentum, and is 0.16 m. high. The circumference at the top of the relief is 0.32 m.; at the bottom 0.15 m. The height of the relief is 0.09 m.; of the neck 0.04 m. The mouth is 0.065 m. by 0.06 m. The diameter of the base is 0.06 m. I am indebted to Miss Richter and Mr. Edward Robinson, assistant curator of the Metropolitan Museum, for permission to reproduce this vase.

in the third century B.C. The vase belonging to the Johns Hopkins University certainly cannot be earlier than the third



FIGURE 5. — VASE IN NEW YORK.

century B.C., and I am inclined to believe that it dates from the second century B.C., although it might be much later, since vases of this type were used for a long time. But it is to my mind equally certain that the vase cannot be dated as late as the second or third century A.D., as is done by Weege who, however, had not seen it (*Rh. Mus. l.c.*).

The inscription *οἰνοφόρος* gives the name of the vase, and is important because the exact names of Greek and Roman vases are not often inscribed on them. The literary evidence is so vague and conflicting that

the archaeologist is frequently in doubt what the exact ancient word for any particular vase was, and welcomes every new example of a vase inscribed with its name. Even after the researches of Panofka, Letronne, Gerhard, Müller, Thiersch, Ussing, Krause, Jahn, and others, the nomenclature of Greek vases is still to a large extent arbitrary.¹

¹ Cf. Walters, *op. cit.* I, pp. 140 f.; II, p. 472; Pottier, *Cat. des Vases Antiques du Louvre*, III, p. 658; Guhl und Köner, *Das Leben der Gr. und Röm.* p. 272; Holder, *Die Formen der Thongefässe diesseits und jenseits der Alpen*, *passim*. When Ussing wrote his *De Nominibus Vasorum Graecorum* in 1844 only two vases inscribed with their names were known, and Rolfe, *Harvard Studies*, II, 1891, pp. 96 f., mentioned only eight such Greek vases (cf. also Kretschmer, *Die Gr. Vasenschriften*, p. 4, note 3). Weege, *Rh. Mus. l.c.*, has added a few more to the list of vases inscribed with their Greek and Latin names, but the number is still very small.

We now know definitely on the one hand what was the Greek designation of such vases as that in the Johns Hopkins University collection. We can call the vase (G. 186; Fig. 4) in the British Museum, the similar though smaller vase in New York (Fig. 5), and other such vases *οἰνοφόροι*.¹ On the other hand, we now know the meaning of the word *οἰνοφόρος*. The classical dictionaries of Rich, Mollett, and others, and the commentaries on Horace, *Sat.* I, 6, 109, Persius, V, 140, and Juvenal, VI, 426, which call this a wine-basket or portable case, are wrong. Smith's *Dict. of Gr. and Rom. Antiquities*, s.v. calls it "a large wine-vessel." Marx (*Lucilii Carminum Reliquiae*, II, p. 66) says, "*Est oenophorus magnum vas vinarium et pretiosum*," but the *oenophorus* in Baltimore is neither *magnum* nor *pretiosum*. The Latin dictionaries, such as the revised edition of Harper's Dictionary by Lewis and Short, call the *oenophorus* "a wine-holder, wine-basket of unknown shape." Marquardt, *Das Pri-*



FIGURE 6. — VASE IN NEW YORK.

¹ The vine with clusters of grapes which occurs on all three vases, the representation of a satyr embracing a Maenad on the British Museum vase, and of Dionysus and a drunken Silenus on the New York vase, already indicated that such vases were used for carrying wine, but we were not sure of their exact name. Just why the subject of the Dioscuri, the twin brothers of Dionysus, should be chosen for such a vase, is hard to see. But perhaps libations of wine were poured to them, and the amphora is often found on the Dioscuri reliefs (cf. Roscher, *Lexicon*, s.v. 1171; Daremberg et Saglio, *op. cit.* p. 255; *Sparta Mus. Cat.* pp. 113 f.; *B.S.A.* XIII, 1906-7, pp. 214 f.).

*vatileben der Römer*², p. 650, was right, when he argued that this was "kein Flaschenkorb sondern ein Henkelgefäß."¹

The *οἰνοφόρος* in Baltimore, then, is not only of interest to the student of Greek and Roman vases, but important also because it settles the meaning of the word *oenophorus*, and makes the masculine form in Latin more probable than the neuter, though there is the possibility of a shift in passing from Greek to Latin as well as of variety in Latin usage.

DAVID M. ROBINSON.

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¹ Smith, *op. cit.*, Rich's *Dict. of Rom. and Gr. Antiquities*, Harper's *Dict. of Cl. Lit. and Antiquities*, Marquardt, *l.c.*, De-Vit's *Lexicon*, and Weise, *Die Griechischen Wörter in Latein*, p. 471, give only the neuter form, *oenophorum*, but the masculine *oenophorus* now seems preferable in view of the Greek *οἰνοφόρος*. In *Isid. Orig.* XX, 6, 1 (the same as the scholium to Persius, V, 140) the neuter nominative singular occurs, but there we have a variant form *oenophorus*. In the *Hermeneumata Einsidlensia* (cf. Goetz, *Corpus Glossariorum Latinorum*, III, 263, 15 and 270, 44, we have *οἰνοφόρον*, *oenophorum*, but this is too late a source to have much weight. The scholium to Horace, *Sat.* II, 8, 39, is the only passage, so far as I know, where the neuter plural occurs, and there it is a restoration for the *ceneforia* of the manuscripts which might be for *oenophoria* from *οἰνοφόριον* (cf. Goetz, *op. cit.* II, p. 381). It is a pleasure to see that Marx, in his recent edition of Lucilius (*l.c.*), silently adopts the form *oenophorus*.

I take *οἰνοφόρος* to be a noun and the name of the vase rather than an adjective, some word like *ἀμφορεύς* being understood. It is a question whether *χάλας* (*Röm. Mitt.* XII, p. III) is the name of the vase on which it occurs, or only refers to the quality of the wine in the vase. It is also a question whether *ἡδόπωρος* is the name of a vase, as Wolters thinks (*A.J.A.* XI, 1896, pp. 147 f.), or an adjective referring to the contents (cf. Weege, *Rh. Mus. l.c.*). But *οἰνοφόρος* is most probably the name of a vase. To be sure, in Athenaeus, X, 432, in a fragment of Critias, we have *οἰνοφόρον κύλικα* and in Herodian, VIII, 4, 9 *οἰνοφόρον σκεῦος* and in Pollux, VI, 14 *ἀγγεῖον οἰνοφόρον* (cf. also X, 70), but in Latin the word is used as a noun, cf. Lucilius, III, 139 (Marx) ap. Nonium, p. 173, 16; Horace, *Sat.* 1, 6, 109; Persius, V, 140; Juvenal, VI, 426; VII, 11; Martial, VI, 89, 6; Apuleius, *Met.* II, 24; *Querolus*, ed. Peiper, p. 38, 5; *Isid. Orig.* I, 35, 3; XX, 6, 1. Probably in Pliny, XXXIV, 70, where the text is corrupt, we should read, as has been suggested, for the name of the statue by Praxiteles *oporon* (autumn), or *canephorum* and not *oenophorum*, since the word does not occur elsewhere as referring to a person or statue.

A PSEUDO-ROMAN RELIEF IN THE UFFIZI. — A RENAISSANCE FORGERY

It is not always easy to distinguish, on casual observation, a genuine Roman relief from Renaissance copies or adaptations, such as those of some sarcophagi of the age of the Antonines. Such reproductions commenced with the earliest days of Renaissance sculpture; witness Donatello's copy, in one of the medallions of the court of the Medici-Riccardi palace in Florence, of a scene from the end of a sarcophagus which still stands in the court itself.

This is the excuse if not the explanation of the fact that a Renaissance relief has been all these years masquerading as a Roman work in the hall of Roman sculptures at the Uffizi, and has been gravely described as antique (Fig. 1).¹ More than four years ago,² I decided that it could not be an antique work, but only recently was I able to examine in Rome other works from the same workshop of the Early Renaissance, which enabled me to date it and place it with accuracy. I then put my theory to a practical test. I took a photograph of the relief, after removing all signs by which it might be identified, to the well-known Renaissance critic Adolfo Venturi, and asked him whether he thought it a work of Renaissance art from a Roman

¹ *Einzelaufnahmen*, Ser. I, No. 236; Dütschke, *Zerstreute Ant. Bildwerke*, III, 526.

² This was in April, 1905. It is curious that three men should have independently reached similar conclusions. After beginning this article in Rome, I referred to it in a conversation with Dr. Hülsen, and he kindly called my attention to an article by Rizzo, published in the *Römische Mitteilungen* in 1907, in which the author says that both Dr. Amelung and himself had independently decided that this relief was not antique. Of this I was quite unaware until Dr. Hülsen told me. It will be seen that I not only attribute the relief to an earlier date than does Rizzo, and determine its school, but that my conclusions as to its theme and its relation to classic models are fundamentally different.



FIGURE 1. — RELIEF IN THE UFFIZI.

workshop. "Of course," he said, "there can be no doubt of it." "Then," I said, "you don't think it a work of classic Roman art?" "What," he answered, in a tone of horrified disbelief, "you are not going to try to prove it Roman?" "No," I replied, "but that it is not."

The relief is not large, measuring only 1.24 m. in length, and 0.60 m. in height. It has evidently lost its crowning member, including the capitals of the two decorative projecting pilasters that frame it at each end. The scene consists of twelve figures engaged in or presiding over a sacrificial scene composed of such a farrago of mistakenly united classic elements as to be difficult of rational description. In the centre is a flaming altar, in front of it a Roman emperor in military costume, with mantle fastened over his right shoulder but draped over his head. In his left hand he grasps his sword, and in his right is a wand with which he touches the altar. Several men, bearded and beardless, assist the Emperor, holding the accessories for the sacrifice—ewers, incense box, and a wand—that may be a misinterpretation of the *praefericulum*. All these figures stand a little back from the Emperor; they are, with one exception, crowned with the triumphal wreath, as he is. Thus far we have a scene that is clearly an adaptation of the imperial sacrifice so common on Roman triumphal arches and memorial columns, with the substitution of grown men in place of the youthful *camilli* as assistants of the Emperor, and without any one to represent the priest. But where are the sacrificial animals, or at least the ox, and where are the sacrificing attendants?

In their place we find in the foreground elements taken from quite another scene of Roman sculpture, which may have been partly derived from just such a sarcophagus as that published by Rizzo in his study on the representations of early Roman myths.¹ This original scene reproduces in his opinion certain legendary matrimonial rites under the auspices of Juno Pronuba, the patroness of marriage. So, in front of the altar in the Uffizi relief we see the sow with her litter, emblem of Juno, held by a sacrificer of small stature, though grown in years.

¹ G. E. Rizzo, 'Leggende latine antichissime' in *Röm. Mitt.*, XXI, pp. 280-306 and 398-402.

To the left stands the boy Ascanius (?) in his Phrygian cap. Then at either end a female figure, seated, frames the scene. That on the left is on a rock against which leans a shield, and she holds a sheaf of wheat (?); that on the right sits on a higher rocky projection and leans on a staff held by her left hand. They are allegorical figures, representing perhaps *Roma* or *Virtus*, and are similar to such figures on the friezes of the arch of Septimius Severus and on numerous coins, especially of the Antonine period.

To any student at all familiar with both Roman and Renaissance sculpture it does not require this demonstration of the absurd juxtaposition of unrelated classic themes to prove the date of the work. It is quite evident from the workmanship alone. The end pilasters are characteristically Renaissance. The facial peculiarities, especially the high cheek bones and the deep lines and furrows about nose and mouth, the form of the wreaths and the high heads, are some of the other most self-evident unclassic characteristics.

To what age and to what school should this relief be attributed?

It shows itself in its style the work of the Early Renaissance before the easier handling that came in about 1500. The city of Rome is indicated as the artist's home, if not his birthplace, by the character of the scene, for no such close imitation of the antique was likely in any other artistic centre. This presupposition is confirmed by the works actually produced by the Roman sculptors who flourished in Rome between *ca.* 1450 and 1480. The workshops of Paolo Romano, of Cristoforo Romano and their pupils and associates, rivalled those of the Tuscans and Lombards who flocked to Rome to take advantage of Papal patronage. The work of this school that most closely resembles our relief is the ciborium of Pope Sixtus IV († 1484), a pretentious work with a large and varied sculptured decoration,¹ in which several men of the Roman school were associated, as we can see by the records published in *L'Arte*, which is gradually making known the neglected works of these Roman artists.

¹ The *disiecta membra* of this important work are in the crypts of S. Peter, and so have been hitherto passed by.

It is not many years since it was possible, without being obviously ridiculous, to make the assertion that the artists of the Early Renaissance studied antique figured compositions almost exclusively in the scenes of the column of Trajan. Now we know that they were equally industrious in copying from triumphal arches, monumental friezes, sarcophagi, and decorative panels. The present relief is merely one more proof. It is really immaterial to inquire whether the artist intended to deceive. He was at any rate a Roman, and produced this work between *ca.* 1460 and 1480. Merely as a work of Renaissance sculpture it has considerable interest, aside from its demonstration of a tendency to exact reproduction of antique models.

Signor Rizzo, who, independently with myself, reached the conclusion that this relief was not antique, has published a supplementary note about it in connection with his publication of the Torre Nova sarcophagus, the scene on which he interprets as that of the mythical marriage of Aeneas and the daughter of King Latinus, under the patronage of Juno Pronuba and of Mars. The sow and her litter and the boy Ascanius are present; also two figures seated on rocks and with shields decorated, one with the Wolf and Twins, the other with a battle scene. These figures he identifies with Mars. He regards the Uffizi relief as important for a reconstruction of this sarcophagus, of which only the lower front part remains. The main divergences between what remains of the sarcophagus and our relief are that the seated figures are male in the former and female in the latter; and that in the sarcophagus there are no traces of any of the principal standing figures except one, the sacrificer. Furthermore, Rizzo believes that the Roman original copied by the Renaissance sculptor originally contained more figures on the right, representing the nuptial scene of the *dextrarum iunctio*, or joining of hands, under the protection of Juno Pronuba. He explains the substitution on the Uffizi relief of female for male seated figures by supposing that the original was not only mutilated on the right end, but also in the upper part, so that the Renaissance artist mistook men for women. He thinks the sacrificial scene meaningless, except as an adjunct to the nuptial scene on the right, which had been

lost on the original before the copyist saw it. He concludes: "The Uffizi relief is a relatively faithful copy, executed perhaps early in the sixteenth century, of a fragmentary relief of the imperial period, similar to that of Torre Nova, and serves to give us an idea of the missing parts of this monument, the interpretation of which can be regarded as absolutely certain."

I cannot agree with Signor Rizzo in any of his conclusions. The artist of the Uffizi relief intended to represent, purely and simply, an imperial sacrifice; the triumphal wreaths that crown the Emperor, his assistants, and the sacrificer admit of no other interpretation, and are not found on other sacrificial occasions. In my opinion the Uffizi relief (1) is not a copy, faithful or free, of any one Roman work, but a pot-pourri; (2) the subject is not a section of a nuptial scene, but a pseudo-imperial sacrifice; (3) the seated female figures were not misinterpretations of mutilated *male* originals, but copies of such models as the "Roma" or "Virtus" of the friezes of the arch of Septimius Severus and of the coins; (4) the "Ascanius" and the sow and her litter are partly derived from some monument similar to the Torre Nova sarcophagus, partly from some such sarcophagus as that of S. Lorenzo, and their substitution for the usual sacrificial animal and a Camillus attendant is due to ignorance.

Evidently the artist *prenait son bien où il le trouvait* and was familiar with numerous reliefs. Could we have actually followed his mental workings as he carved, we should doubtless have found them similar to those of the Phoenicians who imitated Egyptian works so cleverly. In both cases the artist was serenely ignorant of the iconography he was copying and rearranging, and he heedlessly juxtaposed irreconcilable elements when they made to him an aesthetic appeal.

A. L. FROTHINGHAM.

THE BURNING OF ROME UNDER NERO

THE burning of Rome under Nero has, in recent years, given rise to so many researches that it might appear rather useless to return to the subject. But modern scholars differ very widely in regard to one of the principal questions, namely the responsibility for the tremendous catastrophe.

As the students of Roman history remember, an Italian scholar, Professor Pascal of Milan, touched on this question in a pamphlet published in 1900. In this pamphlet, written in a rather concise but interesting manner, Professor Pascal attempts to prove that the authors of the fire were really the Christians of Rome. He describes the early Christian community at Rome as very large, composed in great part of desperate fanatics, who by their subversive ideas were of necessity led to the "propaganda of acts"; furthermore, he supposes that the Christians had numerous proselytes among the praetorians and the fire-police of Rome. So, he concludes, a band of energetic conspirators conceived the idea of purifying the wretched capital of the Roman Empire by setting it on fire, anticipating, with the burning of Rome, the last days of the world.

The criticism of Professor Pascal's pamphlet took, in almost every case, the form of a defence of the Christians of Rome. The arguments on this side were collected in a most complete manner by Dr. A. Profumo, whose book, published in 1905, treats in more than 700 pages all the questions relating to the literary and monumental evidence of the great catastrophe. Dr. Profumo comes to a conclusion quite opposite to that of Pascal: he attributes the sole responsibility for the fire to the Emperor Nero. The emperor, according to him, had conceived the plan of improving the worst of the old quarters of Rome, of whose aspect and sanitary condition he disapproved, by de-

stroying them by fire. He had chosen for this purpose the time of midsummer, when the *scirocco* or *ponentino* blows over the city; this wind would drive the fire from the south corner of the Palatine hill, where at the emperor's order the fire was kindled in the imperial *horrea*, down to the "Valle Labicana," between the Caelian and the Esquiline, where a network of wretched old lanes existed, and where Nero desired to extend his Golden House.

I do not intend to recapitulate the objections which could be made to both these hypotheses: for example, against that of Professor Pascal it could be said that the primitive community of Christians in Rome was surely not so large as he thinks; that the revolutionary ideas of its members have been greatly exaggerated, and that the supposed propagation of Christianity among the praetorians is based on an erroneous translation: St. Paul's words *ἐν τῇ πραιτωρίῳ* (*Philipp. I, 13*) do not signify "in the Praetorian Camp," as it is supposed, but "in the judge's house" or "in the residence (of the emperor)" (Momm-*sen, Röm. Staatsrecht*, II³, p. 807, n. 2). These objections are set forth for the most part in Dr. Profumo's book, which, on the other hand, invites criticisms of a different kind. The idea of deliberately planning such an enormous conflagration, and of actually calculating the direction in which the fire must spread, appears too fantastic even for Nero; to start the fire in the immediate neighborhood of the imperial palace with the intention of destroying quarters nearly half a mile distant is still more fantastic. Any little unsuspected incident might upset the plan, and divert the fire from the course intended; and in fact, what really took place did not correspond at all to the design as conceived by Profumo and represented on his plan (*Tav. 2*).

Instead of recapitulating these and other objections, I want to call attention to a simple date, which has not been observed as yet by any of the numerous writers about Nero's fire, but which seems to me of some importance. The conflagration began on the 19th, or perhaps more exactly in the night between the 18th and the 19th of July, 64 A.D., as we learn from the contemporary testimony of Tacitus. Now, every astronomical calendar tells us that in July, 64 A.D., it was full moon

on the 17th, exactly one day before the outbreak of the fire.¹ Every one who has had occasion to see the full moon on a Roman summer night will remember that the brightness of the light and the transparency of the air make such nights almost like day. The inhabitants of modern Rome—and those of ancient Rome would not have done otherwise—prefer in these *dies caniculares* to stay awake a great part of the night and to rest during the day. If a band of conspirators, or of Nero's emissaries, planned to set the town on fire, they surely should have done so to be successful a fortnight before or after the 17th of July, but there could not be chosen a less convenient time than this to carry out a plot requiring the darkness and the stillness of the night.

I conclude, therefore, that the outbreak of the fire was really due to accident. It may be that some of the Christian party fell under suspicion because of their behavior during and after the conflagration. Seeing the terrible catastrophe which was happening to the capital of the world, it was very easy to think that this was the beginning of the last judgment, which they were expecting in the very near future. The fire appeared to have come upon the wretched town providentially, so that it might be regarded as wrong to interfere with its progress. It may be that among those who menaced the firemen (*minis restringere prohibentes*, Tacitus, *Ann.* XV, 38) were some zealous Christians. And when, after the extinction of the fire, Nero attempted to regain the favor of the gods by sacrifices and ceremonies, the Christians naturally abstained from participating in the sacrifices to Vulcan and Juno and in the processions to the temples of the Olympic gods. Their insensibility to the general feeling could easily promote the suspicion that they had been the real authors of the great conflagration.

On the other hand, there was abundant reason for attributing the whole responsibility to Nero. The Emperor, in the beginning, not at all averse to the destruction of the wretched plebe-

¹ Professor E. Millosevich, Director of the Royal Observatory of the Collegio Romano, kindly gave me the following information: "The exact time of the full moon of July, 64 A.D., was eight minutes past two of the morning of the 17th (central Roman time). The moon rose at Rome on the 16th of July at two minutes past seven P.M. and set the following morning at four minutes past four."

ian quarters, probably gave orders to move slowly in the work of extinguishing the fire. It may be that the magnificent view of the conflagration made him break out into admiring words, and aroused in his mind the remembrance of the burning of Ilium. These and other imprudent expressions were naturally noted and were sufficient to forge the material for the accusations we find suggested in the writings of Tacitus and Suetonius, and definitely expressed in Dio Cassius and Xiphili-nus. To the human mind, as J. G. Hamann says, it is common to prefer the probable to the true.

CH. HÜLSEN.

ROME,
December, 1908.

Archaeological
Institute of
America

GENERAL MEETING OF THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

DECEMBER 28-31, 1908

THE Archaeological Institute of America held its tenth general meeting for the reading and discussion of papers at the University of Toronto, Toronto, Canada, Monday, Tuesday, Wednesday, and Thursday, December 28, 29, 30, and 31, 1908, in conjunction with the annual meeting of the American Philological Association.

The Annual Meeting of the Council of the Institute was held on Monday, December 28, and Thursday, December 31; the Annual Meeting of the Managing Committee of the American School of Classical Studies in Rome was held on Tuesday, December 29; and the Annual Meeting of the Managing Committee of the American School for Oriental Study and Research in Palestine was held on the same day.

Monday evening at 8.15 o'clock the Institute and the Association held a Joint Session, at which Professor Francis W. Kelsey, President of the Institute, presided. President Robert A. Falconer of the University of Toronto made an address of greeting, to which Professor George F. Moore of Harvard University, Vice-President of the Institute, replied. Professor Charles E. Bennett of Cornell University, President of the American Philological Association, then delivered the annual address entitled, *An Ancient Schoolmaster's Message to Present-day Teachers* (see *The Classical Journal*, February, 1909, pp. 149-164).

Tuesday, December 29, President Falconer entertained the members of the Institute and of the Association at a luncheon in the East Hall of the Main Building. In the evening at 8.15 o'clock a memorial session was held in honor of Charles

Eliot Norton, founder and first President of the Institute. Professor Kelsey presided. Two addresses were delivered: the first, by Dr. Edward W. Emerson, of Concord, Mass., was entitled, *Professor Norton as Man and Scholar*; the second, by Professor William Fenwick Harris, of Harvard University, *The Service of Professor Norton to Liberal Studies in America*. After the session the Classical Staff of the Colleges in the University of Toronto entertained the visiting members of the Institute and the Association informally in the Faculty Union. Wednesday afternoon, December 30, Mr. and Mrs. Edmund B. Osler received the members at their home, Craigleigh.

A resolution was passed thanking President Falconer and the Classical, Archaeological, and Semitic Staffs of the University of Toronto and Mr. and Mrs. Osler for their hospitality and for the excellent arrangements made for entertaining the visiting members.

In addition to the sessions of Monday and Tuesday evenings there were five sessions at which papers were presented. The abstracts which follow were, with few exceptions, furnished by the authors.

TUESDAY, DECEMBER 29. 9.30 A.M.

Principal Maurice Hutton presided.

1. Professor John C. Rolfe, of the University of Pennsylvania, *Two Etruscan Mirrors*.

This paper is published in full in the JOURNAL, pp. 3-18.

2. Professor Charles C. Torrey, of Yale University, *An Old Jewish Picture of the Sacrifice of Isaac*.

By the second commandment of the Decalogue, the Hebrews were forbidden to make pictures or images which might serve as aids to idolatrous worship. We have not the means of knowing how seriously this prohibition was taken in the time of the Hebrew kingdoms. In the account of the building of Solomon's temple, we find mention of images of lions and oxen, a fact which is all the more noteworthy in view of the worship of images of a bull-god in the northern kingdom. The recently discovered seal of the "Servant of Jeroboam," with its finely executed figure of a lion, dates from this early period, and we have a few other examples.

We know that from the Maccabean time onward the Jews were generally averse to making likenesses of human beings or animals. This fact appears very strikingly in their coinage, especially in contrast with the coinage of their neighbors round about.

An old Jewish seal bearing a representation of Abraham's sacrifice is therefore an object of more than usual interest. The seal here described was found in Syria, and is now in the New York Public Library. The material is clay, with one side glazed. The reverse—the glazed side—bears an inscription, probably a charm, which is written in Hebrew characters which appear to belong to the second or third century A.D.

3. Mr. Gordon Allen and Mr. Lacey D. Caskey, of Boston, *Restoration of the Stoa in the Asclepieum at Athens*. (Read by Dr. Kendall K. Smith, of Harvard University.)

This paper will be published in full in a later number of the JOURNAL.

4. Professor William F. Harris, of Harvard University, *A Little Homeric Problem*.

The passage in the *Odyssey* describing the return of Odysseus to his swineherd's hut after his wanderings was quoted. The dogs came charging out. The ancients believed that Odysseus "sat down," and so saved his life, because the dogs respected such a posture. Odysseus in reality "crouched" for an imaginary stone. This interpretation is proved by the use of the same word to describe Hector crouching before Achilles' flying spear. *Odyssey*

5. Professor Allan Marquand, of Princeton University, *Robbia Notes*.

Three unpublished Robbia works were described:

(1) The Antinori lunette, representing the Madonna and Angels, which was ascribed to the Robbia Atelier. (2) An Altarpiece at Pescia representing the Madonna with Angels and Saints, assigned to Luca della Robbia, and (3) The Bartolini Emblem, made, probably, in 1520 for the Bartolini palace, then erected in the Piazza di Santa Trinita.

6. Professor T. Callander, of Queen's University, Kingston, *Notes on a Journey in Isauria*.

The paper embodied some epigraphic results obtained in the summer of 1907. A brief description of the topography, illustrated by

typical views from the valley of the Ermenek Su, made evident the inaccessibility and rugged scenery of the central highlands. Inscriptions and sculptured *stelae* from the upper reaches of the Calycadmus (Artanada and neighborhood) were next discussed, with the object of displaying the various phases of culture from Hellenic to Byzantine times. Most of the monuments belong to the third and fourth centuries A.D., and recall the part played by the Isaurians in military and ecclesiastical affairs of the Eastern Empire.

7. Professor Samuel E. Bassett, of the University of Vermont, *A Type of Roman Lamp: Dressel's Forma 25.*

The paper gave some of the results of a study of about two hundred lamps of the type represented by *formae* 24 and 25 in *C.I.L.* XV, 2, Plate III. This type is peculiar to Greek soil (cf. *A.J.A.* VII (1903), pp. 338 f.), and is characterized by the shape of the nozzle, by an ovolo ornament on the margin, interrupted by a raised knob in the middle of either side, by the fineness of clay and technique, and by the Greek inscription on the reverse. About sixty inscriptions were found, nearly half of which have been unpublished hitherto.

The type, along with several others, seems to have been derived from Dressel's *forma* 5 (*C.I.L. l.c.*) during the first century A.D. The reasons given for this date, which is a century or two earlier than that given by La Blanchère and Gauckler, Toutain, Walters, and others, were as follows:

(1) The reliefs on lamps of this type are similar in technique and often identical in subject and details with those found on *formae* 9-13, which are certainly as early as the first century. (2) Lamps of this type were found at Corinth, together with fragments of *forma* 13, all made of the same clay. (3) *Forma* 25 was found at Pompeii and Herculaneum. (4) A lamp of *forma* 20, which belongs to the same period as *forma* 25, was found in an urn in the columbarium near the Porta Latina at Rome, which is dated with certainty about 62 A.D. (G. P. Campana, *Di due Sepolcri Romani del Secolo di Augusto scoperti tra la Via Latina e l' Appia presso la Tomba degli Scipioni*, Roma, 1840.)

8. Dr. Esther B. Van Deman, of the American School of Classical Studies in Rome, *The So-called Flavian Rostra*. (Read by Professor Wilson, of Johns Hopkins University.)

This paper will be published in full in a later number of the JOURNAL.

TUESDAY, DECEMBER 29. 2 P.M.

Joint Session of the Institute and the Philological Association. Principal William Peterson presided.

The following archaeological papers were presented:

1. Professor William N. Bates, of the University of Pennsylvania, *An Unpublished Portrait of Euripides*.

In the Imperial Ottoman Museum at Constantinople there is an interesting relief dating probably from the first century A.D. In the centre is Euripides seated and facing to the left, while the Tragic Drama, personified, offers him a tragic mask. Behind the poet is a standing statue of Dionysus. The names are carved above the figures.

2. Professor George A. Barton, of Bryn Mawr College, *The Development of Babylonian Picture Writing*.

Babylonian writing, like that of Egypt and China, began with picture writing. The pictures were not as good as those made in Egypt, and were, owing to the nature of the writing material, soon developed into conventional signs. Owing to similarity in objects to be represented and to similar psychological processes, a certain similarity exists between early Chinese, Egyptian, and Babylonian signs. Similarly in all three countries the pictures developed into mere symbols. In Egypt, owing to the nature of the writing materials and the genius of the people for drawing, this was long delayed; in Babylonia it occurred early. After the signs had been conventionalized they continued to undergo development, so that there are nine or ten distinct periods in the writing, besides many individual idiosyncrasies in each period. Delitzsch regards many of the signs as composed of combinations of *motifs*, each of which represented an abstract idea. This is undoubtedly wrong, as the writer has shown elsewhere. Sometimes a study of the earliest forms and an analysis of the ideographic meanings enables one with tolerable accuracy to restore the original picture. Thus UMUNU, meaning worm, flea, moth, louse, was shown to be a picture of a caterpillar. Sometimes several originally distinct pictures have blended into one sign. For example GEŠPU combines in its 121 ideographic values meanings derived from a picture of the sun disk, the crescent of the moon, the mouth of a cistern, and a circle used to represent the number ten.

3. Professor James H. Breasted, of the University of Chicago, *The Temple of Soleb, A New Form of Egyptian Architecture*.

The colonnade as an architectural form emerges in Egypt as early as 2750 B.C., although it is not found in Babylonian architecture at all. In the earliest Egyptian colonnades, the columns are all of one size and the roof is on the same level throughout each hall. This continued till about 1400 B.C. By 1350 B.C. we find in the famous hypostyle hall at Karnak a double row of taller columns in the middle, with smaller columns on each side, and the roof correspondingly higher in the middle over the taller columns, producing a clear-story, and presenting the fundamental elements of basilica architecture.

None of the introductory or transitional stages which must have gradually led up from the old halls (with roof all on one level) to the basilica type first found complete at Karnak, has hitherto been discernible. The huge double row of columns at Luxor, standing in the axis of the temple, but lacking any side aisles, is evidently an unfinished basilica hall like that at Karnak. This carries the basilica type back to the early fourteenth century B.C.

During the work of the University of Chicago Expedition at Soleb in Upper Nubia, I noticed what had already been observed by Lepsius's architects, that just as at Luxor, there is at Soleb a similar double row of vast columns in the axis of the temple, in front of the first court and in front of the pylon. The question at once arose: Is this also an unfinished basilica hall, left without its lower colonnades on each side, as at Luxor? In lieu of the lacking side colonnades, just as at Luxor, a wall has been erected on each side, parallel with and close to the double row of columns, producing a long narrow hall in the extended axis of the temple. Are these side walls a makeshift to enclose the unfinished basilica as at Luxor? Unfortunately the superstructure of the Soleb hall has perished and only the ground plan is now discernible. The pylon back of this hall, upon which its side walls abut, is the work of Amenhotep III, the builder of the entire temple, as the inscriptions upon it show. An examination of the masonry showed that these side walls from bottom to top engage in the masonry of the pylon, and do not merely impinge upon the pylon. This proves that the builder of the pylon had planned these side walls from the beginning, erecting them as he did along with the pylon course by course. He therefore planned a nave without side colonnades, and without side aisles. Such a nave must have been for a time, then, a recognized form of temple architecture. It was not a pleasing form, nor one which the Egyptian long retained, but as the development continued, it is for us an interesting transitional stage, through which the architecture of Egypt passed, on its way toward the noble basilica form, which was to furnish later Europe with the greatest fundamental elements of cathedral architecture.

4. Professor Francis Brown, of Union Theological Seminary,
Visits to the West Shore of the Dead Sea and the Arabah.

The paper, illustrated by thirty-one lantern slides, described briefly: (1) an expedition of six days by members of the American School for Oriental Study and Research in Palestine from Jerusalem to 'Ain Jidy, Es-Sebbeh (Masada), and Jebel Usdüm, in January, 1908. Es-Sebbeh was ascended, and various observations of more or less interest were made. An account of the trip was given in the *Pal. Ex. Fund* for July, 1908, by Dr. E. W. G. Masterman, who was of the party; (2) the return from Petra to Jerusalem, in May, 1908, by way of El-Beïda, Wady Nemeh (Robinson's route in 1838), and the Arabah, with a night in Wady Fedân, and one at 'Ain el-Arûs (although this and some other names are vaguely applied, without full agreement). Characteristic features of the Arabah were noted. The farther route passed west of Jebel Usdüm, and turned up Wady Zuweirah to the rock pools (with abundant water), and thence to Kebrât and Hebron. From Petra to Jerusalem took seven days, in convenient stages. No human beings were encountered between 'Ain Jidy and Jebel Usdüm, nor between El-Beïda and Kebrât.

5. Professor William H. Goodyear, of the Brooklyn Institute of Arts and Sciences, *Recent Observations on the "Widening Refinement" in Amiens Cathedral.*

Under the term widening refinement is understood a hitherto unnoticed but widespread system of mediaeval church and cathedral construction in which the vertical lines of the nave diverge in the upward direction. The announcement of such a system of intentional construction has been met by the denial of its existence on the part of many distinguished experts, especially in France. Such experts presume the facts to exist, but attribute them to accidents caused by the thrust of the nave vaulting. The proofs of an intentional construction are, however, many, and have been recognized by distinguished experts in construction. The monuments examined, and supposed to offer these conclusive proofs, include a large number in Italy, a large number in northern France, and other churches in Constantinople.

The widening refinement includes many cases of widening in straight lines, and these cases are more easily shown to be constructive than those in which the widening occurs in vertical curves. The demonstration of the present paper does not debate the latter. It is confined to the cases of widening in straight lines. There are two phases of this: piers which incline outwards from the pavement up and piers which are perpendicular to the capitals; with vaulting-shafts which diverge in straight lines, beginning at the capitals.

To the former class belong among other churches, Saint Alpin at Chalons, Saint Loup at Chalons, Saint Ouen at Rouen, and the Cathedral of Rouen. To the latter class belong, among other churches, the Cathedral of Rheims, the Cathedral of Amiens, the Cathedral of Laon, and Saint Remi at Rheims.

If the widening refinement were due to thrust, in the case of churches with piers which lean out from the pavement up or with shafts which lean out directly above the capitals, the lines would bend or curve above the counter thrust and weight of the side aisles. Since resistance to the nave thrust decreases in the upward direction, accidental widening in straight lines against the weight and counter thrust of the side aisles is not to be assumed as likely or possible even in a single instance. The possibility of a subsidence of the exterior lower walls of the churches appears to be the only one which even in theory could explain an accidental widening of the kind described and observed. If such subsidence had taken place at Rheims or at Amiens, it would be known to the experts in charge of repairs. Constructive stability is not endangered by the system discussed. At Amiens the lean outward is less than one-seventh of the diameter of the pier, and at Rheims the piers are far heavier than at Amiens, whereas the maximum inclination is the same.

It seems probable that the counter-action of an optical narrowing in, or spindling effect, due to perspective convergences, may have been one purpose of the widening refinement. But it also seems probable that this refinement is the expression of a positive artistic preference, based on experience and on good taste, for a diverging effect in the vertical supports of an arch. The preference, on the part of Arab builders, for the horseshoe effect in arches, may be a related fact.

The widening refinement dates back to the sixth century at Constantinople, and it disappears with the overthrow of the Gothic style by the Renaissance, in the sixteenth century. This overthrow was so complete that even the existence of the refinement has been forgotten.

6. Professor Henry A. Sanders, of the University of Michigan, *The Date and Place of Writing of the Biblical Manuscripts in the Freer Collection.*

This paper will be published in full in a later number of the JOURNAL. /s/ J. S. J.

WEDNESDAY, DECEMBER 30. 2 P.M.

Professor James R. Wheeler, Chairman of the Managing Committee of the American School of Classical Studies at Athens, presided.

1. Professor Jesse B. Carter, of the American School of Classical Studies in Rome, *The Death of Romulus* (read by Professor A. F. West, of Princeton University).

This paper is published in full in the JOURNAL, pp. 19-29.

2. Professor David M. Robinson, of Johns Hopkins University, *An Oenophorus in Baltimore*.

This paper is published in full in the JOURNAL, pp. 30-38.

3. Professor Charles H. Weller, of the University of Iowa, *Pausanias's Use of ναός and ἱερόν*.

The distinction commonly made between a ναός as belonging only to a deity, while a hero had an ἱερόν (Frazer, *Paus.* II, p. 153), will not hold universally (cf. *Paus.* I, 35, 3 and 37, 4) and the argument must be used with caution, for example, in the identification of the "Theseum" (Frazer, *l.c.*). The question as to the orientation of ἡρώα also demands further consideration. The present paper is a preliminary note which will be extended and published later.

4. Dr. Kendall K. Smith, of Harvard University, *The Group Dedicated by Daochus at Delphi*.

This paper will be published in full in a later number of the JOURNAL.

5. Mr. Charles R. Morey, of Princeton University, *The Origin of the Fish Symbol*.

Of the various theories regarding the origin of the fish symbol used in early Christian art and literature to denote Christ, none have found acceptance. De Rossi and Wilpert leave the question open. The Sibylline acrostic formula, which, according to some, originated the symbol, is not referred to by writers earlier than Tertullian. The first trace of it upon Christian monuments is the inscription upon a late second century gem in the Kircherian Museum at Rome. Negative evidence, therefore, points to the end of the second century as the date of the formation of the acrostic formula.

The fish symbol itself does not seem to antedate the same period. The fish and the other symbols on the sarcophagus of Livia Primitiva can hardly be contemporaneous with the inscription which is ascribed to the early second century. All other monumental evidence points to the end of the second century as the date when the fish began to be used as an isolated hieroglyphic of Christ. There

is no trace of such use in the catacomb paintings of the first two centuries.

Although the acrostic and the symbol seem to have appeared about the same time, the latter cannot have been entirely due to the former, for two reasons. (1) The eucharistic meaning consistently attached to the fish in early Christian literature undoubtedly shows that the symbol was connected with the Eucharist in its original form, and (2) this eucharistic meaning can be traced back beyond the probable date of the invention of the acrostic. The key to the puzzle is doubtless to be found in the early and constant use by the catacomb painters of the multiplication of loaves and fishes, to symbolize the Eucharist. This scene was constantly abbreviated to five loaves and two fishes, or a loaf and a fish, or the like, which stood for the eucharistic elements, the bread and wine, just as the miracle stood for the whole sacrament. The loaves and fishes, or loaf and fish, whether used together or separately, came thus to represent vaguely the body and blood of Christ in the sacrament, or Christ himself. This association of ideas was then at the end of the second century crystallized into a definite concept, fish = Christ, by the invention of the acrostic.

6. Dr. J. Walter Fewkes, of the U.S. Bureau of Ethnology, *Excavations and Repair of Casa Grande.*

The excavation and repair work done by the Smithsonian Institution at Casa Grande, Arizona, was described and illustrated with lantern views. The speaker urged the necessity, in all archaeological work, of repairing excavated walls in order to prevent deterioration, and called attention to methods adopted for the protection of the walls of Casa Grande from the elements. Photographs were thrown on the screen illustrating the mounds of Casa Grande and bird's-eye views of buildings therein, after completion of the repairs. The speaker described also excavation and repairs, by the Interior Department, of a cliff-dwelling called Spruce-tree House in the Mesa Verde National Park, Colorado, illustrating his remarks with views of the ruin before and after the completion of the work.

7. David Boyle, Esq., of the Ontario Provincial Museum, *The Indian as Mechanic and Artist.*

The speaker prefaced his remarks by some general statements, and among these was one to the effect that art instinct was no evidence of culture, because it is well known that some of the most debased peoples in the world have developed tastes indicating a sense of the beautiful; for example, the Dyaks of Borneo, numerous

African tribes, and our own Indians, each having its own standard. The American Indian decorated himself with the scalps of his departed enemies, but the native of Borneo appropriated the whole of his enemies' heads, and as it was not convenient to use heads either as a necklace, or slung around his waist, he mounted them on posts erected for the purpose in the neighborhood of his hut. The speaker then referred to the Attiwandarons or "Neutrals," of Ontario. They occupied, he said, a strip of varying width along the whole of the north shore of Lake Erie and were known to the whites by the latter name after their arrival in Canada between the years 1540 and 1600. From this point Mr. Boyle made use of his material, a case of which he had for inspection, to illustrate the artistic forms produced by the people in question. The objects were all made from a finely grained, striped, or veined slate, known geologically as Huronian.

WEDNESDAY, DECEMBER 30. 8 P.M.

Joint Session of the Institute and the American Philological Association. Professor Charles E. Bennett, President of the American Philological Association, presided.

The following archaeological papers were presented :

1. Dr. Edgar L. Hewett, of the School of American Archaeology, *The Excavations at Tyuonyi, New Mexico*.

This paper will be published in full in a later number of the JOURNAL.

2. Professor A. L. Frothingham, of Princeton, New Jersey, *Discovery of the Sarcophagus of Marcus Aurelius* (read by Professor Harold N. Fowler).

A well-known but much misunderstood monument in the Vatican museum, the immense carved porphyry tomb of the Empress Helena, was the sarcophagus of the Emperor Marcus Aurelius. The artists of the Emperor Constantine are supposed to have executed it for his mother's mausoleum, while in reality they stole it from an imperial sepulchre and made no change in it except to turn four busts into likenesses of Constantine and Helena.

An examination of its reliefs and a comparison with undoubted Constantinian works shows that it belongs to the early Antonine age and particularly to the reign of Marcus Aurelius or of Commodus. It is in the same style as the column of Marcus Aurelius and the Aurelian reliefs on the Arch of Constantine and in the Capitoline museum, though it far surpasses them all. The principal scene is a

sacrificial slaughter of barbarian prisoners by Roman cavalry on the occasion of the funeral ceremonies of the personage buried in the sarcophagus; a continuous scene around all four of its faces. Notwithstanding the iron-like hardness of the porphyry, the sculptor has detached his figures almost entirely from the background, and shows extraordinary dramatic power. The rest of the decoration is now interpreted for the first time as of astrological character, and representing the horoscope and fortune of the personage here buried.

After showing how universal among the Romans was the belief in astrology, which was recognized on official imperial monuments from the time of Augustus, the author showed that the presence here of the lion, symbol of the sign of the Zodiac, Leo, proves the sarcophagus to be that of the Emperor Marcus Aurelius who was born under that sign, and with whom the lion was associated during his lifetime. Porphyry was the material for imperial sarcophagi, and Marcus Aurelius is the only emperor to whom this work could be attributed. It probably stood in one of the niches of the mausoleum of Hadrian until Constantine removed it to be used for his mother.

3. Professor William N. Bates, of the University of Pennsylvania, *A Heracles Head from Sparta.*

This paper will be published in full in a later number of the JOURNAL, (p. 157).

THURSDAY, DECEMBER 31. 9.30 A.M.

1. Mr. Henry D. Wood, of Philadelphia, *The Roofing of the Propylaea at Athens.*

This paper will be published in full in a later number of the JOURNAL.

2. Professor H. L. Wilson, of Johns Hopkins University, *Excavations of 1908 in the Roman Forum and near the Arch of Titus.*

The speaker reported the progress made during the year 1908 in the excavations of the Forum and described the work done near the Arch of Titus. The Republican buildings, to the northwest of the Arch, the tombs on the side next the Palatine Hill and the walls of tufa in *opus quadratum* on the southeast were the chief matters discussed, and reasons were given for doubting the claim that these last-mentioned walls are the foundations of the earlier temple of Jupiter Stator.

3. Dr. Ralph Van Deman Magoffin, of Johns Hopkins University, *The Quinquennales*.

After a rapid summary of all the information obtainable on the Quinquennales, it becomes clear that the present stock of knowledge concerning these officers, while fairly correct in general, is very meagre in detail. They perform approximately the same duties in the municipalities as the censors do in Rome. But instead of being elected to this office in the regular round of the municipal *cursus honorum*, it appears that the Quinquennales were at first either appointed by Roman officials, or nominated by them to the municipal electors. The first part of the paper concludes with a summary of all the facts gathered from the many inscriptions cited, which present the reasons for saying that the Quinquennales were not necessarily citizens of the town in which they held that office, that the office is probably first attributable to Sulla, that these officers were first appointed by the central authority in Rome, or designated by it, and that the office was not the highest honor in the regular municipal *cursus honorum*, for many Quinquennales are found who do not hold any other offices in the town.

The second part of the paper offers a new classification for the Quinquennales, in place of the one in Marquardt-Mommsen and of that in the Forcellini-De Vit lexicon. Then follow statistics concerning the functions of these officers, the oddities in their *cursus honorum*, and the varieties of *collegia* and *corpora* in which they are found. The paper closes with figures which give the customary abbreviations for Quinquennales, and then an alphabetical list of all those who are mentioned in literature and inscriptions.

4. Mr. Herbert Fletcher De Cou, of Chicago, *Antiquities from Boscoreale in the Field Museum*.

The objects discussed in this paper will be published by the Field Museum of Natural History, Chicago.

5. Dr. Clark D. Lamberton, of the University of Pennsylvania, *Themes from St. John's Gospel in the Paintings of the Catacombs*.

When the paintings in the catacombs of Rome are investigated with respect to their sources it is found that St. John's Gospel is represented with a well-defined cycle of themes. This cycle is composed of themes of two classes, those which belong numerically, that is, those which are found in the Johannine Gospel only and nowhere else, such as the Miracle of the Wine at Cana of Galilee, the Conversation with the Woman of Samaria at Jacob's Well, the Raising of Lazarus, and probably the miracles of the healing of the Para-

lytic at the Pool of Bethesda, and of the Blind Man at the Pool of Siloam; and those which belong characteristically, that is, those which are found also in other Gospels or other parts of Scripture, but which were evidently chosen from the Fourth Gospel because they find most adequate interpretation in the prevailing characteristic of that Gospel, viz., the spiritual nature of the Christian life, which is regarded as continuous. Under this class are found such themes as the Baptism, eucharistic scenes and emblems, the Incarnation, the Good Shepherd, etc.

When the chronology of this Johannine cycle is considered it is found to have a bearing, more or less important, upon the question of the date of the Gospel. Selecting only the earlier paintings of some of these themes, the following dates are ordinarily given: The two earliest paintings of the Woman of Samaria are in a "sacrament chapel" in the catacomb of St. Calixtus of the second half of the second century, and in the "passion crypt" in the catacomb of St. Praetextatus of the first half of the second century. In this same crypt is a painting, on the same wall and of the same date, which formerly was regarded as that of the "Coronation of Thorns," but which now is disputed and by some is named the declaration of the *Agnus Dei* (Jn. I, 29), and this, taken in connection with the third picture on this wall, the Raising of Lazarus, has induced the name of the "Johannine," rather than the "Passion crypt." There are fifty paintings of the Raising of Lazarus in the catacombs, of which five date from the second century. The first of these is in the catacomb of St. Priscilla in the so-called Greek chapel. J. Wilpert, who has published it, has carefully investigated its date, and places it in the early years of the second century, in the reign of Trajan, or perhaps Hadrian. In the same chapel is found the first treatment of the eucharistic feast, and not far away the Incarnation is portrayed by a contemporary painting of the "Madonna of the Prophet." The Good Shepherd is found even in the first century in the hypogeum of the Flavii in the catacomb of St. Domitilla. Hence it is reasonable to conclude that the Gospel of John must have been circulated in Rome in the early years of the second century, which requires the supposition that it must have been written some time before, in order to find its way from Ephesus to Rome.

6. Miss Elizabeth M. Gardner, of Wellesley College, *A Group of Sculptures from Corinth*. *Am. Mus. Nat. Hist.*

The fragments of a relief representing the Gigantomachy found in Corinth in 1903 have been studied with a view to determining the original employment of the relief, the probable number and character of the figures it bore, its period, and its relation to other representations of the same subject.

Certain technical details, chiefly the smooth finish of the reverse and the uneven thickness of the plinths on which the sculpture rests, indicate that it was used as a barrier or a parapet; the negligent carving of the upper surfaces shows that it was set up above the level of the eyes. Accordingly it is suggested that the parapet may have crowned one of the Greek terrace walls. Other peculiarities show that it was reemployed at a later date in some position where the reverse came in direct contact with a vertical surface.

From the existing fragments the height would seem to be about one metre, the length six metres. Of the figures there are remains of at least three giants and thirteen Olympians. Among the latter can be surely identified Athena and Heracles, and probably Zeus, Ares, and Dionysus. No restoration of the composition as a whole is possible; there are not even indications as to the placing of any single pair of combatants.

The style is sketchy; details not readily seen from the normal point of view are blocked out roughly. The proportions seem to have been somewhat unsteady, arms in particular being apparently too short for the heads. But these qualities are not enough to mark the work as Roman; and the combination of freshness and vigor of handling with a delicate sensitiveness and reserve in rendering certain of the heads and the drapery, as well as the apparent lack of crowding in the composition, leads to the conclusion that the work is Greek.

Judging from the style alone the period would seem to be pre-Pergamene; moreover the conception of the scene as a whole seems untouched by Pergamene influence. To be sure the use of serpent-footed giants might be alleged against an earlier dating. But a serpent-footed giant grouped with Athena in exactly the scheme of the frieze around the altar of Zeus occurs on the handle of a Campanian amphora (published in the *Monumenti Antichi* V, pl. XII). The amphora can hardly be dated later than the third century, i.e. a good fifty years before the erection of the Pergamene monuments. This bit of evidence strengthens the conclusion that the Corinth Gigantomachy may be regarded as a Greek work, earlier in tendency and style and possibly in date than the great frieze at Pergamon. It will then be of interest, not only as another original work of the Hellenistic period, but as the first example in sculpture of a gigantomachy with serpent-limbed giants.

7. Dr. William H. Worrell, of the University of Michigan, *A Coptic Biblical Manuscript in the Freer Collection.*

The manuscript contains a considerable portion of the Psalms in the Sahidic or Upper Egyptian Dialect of Coptic, and is one of the three oldest manuscripts of the Sahidic Psalter. It was purchased

in Cairo in 1908. It is written on two kinds of material, probably goat-skin and sheep-skin. The arrangement of leaves and quires was discussed. The writing is in two hands, both of the same date, which is probably the fifth century after Christ.

The paper is to be published in full.

8. Professor Thomas Fitz-Hugh, of the University of Virginia, *The Cult Significance of the Carmen Arvale*.

Coincidentally with the determination of the rhythmic relations of the five times repeated *triumpe* at the close of the Carmen Arvale (cf. *Supplement to Italico-Romanic Rhythm*, Anderson Bros., 1908), the venerable old hymn revealed itself to me as a magical glorification of the sacred spear-symbol and tripudium-ritual of Mars. The form of the marble which bears the latter part of the inscription (Ritschl, *Mon. Epig.* XXXVI) is that of a spear head. The rhythm

of the sacred tripudium (*triumpe*, $\overset{\curvearrowright}{\underset{\curvearrowleft}{P}}\text{-}\overset{\curvearrowright}{\underset{\curvearrowleft}{P}}\text{-}\overset{\curvearrowright}{\underset{\curvearrowleft}{C}}$), which is the natural stress rhythm of the spear-thrust or leap-step, as of all sustained movement, is apparent in a graphical reconstruction, so arranged as to represent the several varieties of the tripudic foot as explained in my *Sacred Tripudium* (Anderson Bros., 1909).

The festival of Dea Dia, among whose records this ancient memorial of the Mars-cult has been preserved to us, was the localized form of the Ambarvalia on the outskirts of the primitive *ager Romanus*. Under Greek influence in the time of Augustus, Dea Dia has replaced the old national god of the spear, but in the heart of the three days' festival was still retained the sacred tradition of the past, the venerable hymn and dance of the sacred spear and leap-step of Mars. In utter secrecy within the closed doors of the temple of Dea Dia the magic charm is wound up which is to control the fierce activities of the god. The mighty *numen* of the spear is conjured by the magical efficacy of his sacred symbol and his sacred tripudium in the prayer and dance of his priests. We have to do with a unique form of what anthropologists call sympathetic magic. It is unique in its artistic and literary type, which illustrates the primitive evolution of literature and art out of the ideal inspiration of religion and the sacred cult. The mystic charm is occult in the form, phraseology, and rhythm of the secret rite, which is itself a mystic enactment of the process which the *numen* himself is to perform. It is the binding power or *religio* of such mystical imitation or sympathetic magic, which explains the Roman's spiritual attitude in the ceremonies of the *aqualeticium* with the sacred rain-stone (*lapis manalis*), the *argeorum sacra* with the puppets of straw, the *augurium canarium* with the red dog, and the ceremony of treaty-making with the sacred *silex* (*Iuppiter lapis*) of the Capitoline temple.

I think, therefore, that we have in the Carmen Arvale a cryptograph of the spear-symbol and tripod-ritual of the primitive national *numen* of the Italico-Latin stocks. The hoary little monument is of precious significance for the interpretation of the fundamental laws of rhythm in Latin speech and verse, as well as for the fundamental interpretation of the Mars-cult: it is a cryptograph of science as well as of religion and art; cf. Wissowa, *Religion und Kultus der Römer*, pp. 130 ff.

9. Dr. Alfred M. Tozzer, of Harvard University, *The Value of Mexican Manuscripts in the Study of the Development of Writing*.

The pre-Columbian Mexican manuscripts and those written soon after the Conquest illustrate all the early stages in the development of writing. Pure picture writing is shown in nearly all the manuscripts where the signs are used simply in their objective sense. The development of pictures into conventionalized pictures, or the development into symbols which in turn may become conventionalized, appear. Suggestion here takes the place of representation.

The Spanish priests were quick to take advantage of the ability of the natives to read in pictures and they translated their catechism into pictures. We find no trace of the sound of the Spanish words at first, but simply the ideas of the Creed and the other articles of the Church expressed in pictures.

The next step is where sound comes in for the first time as a factor. It is not the object but the name of the object that is desired. The principle of the rebus is employed. It is this step that is illustrated with special clearness in the Nahua manuscripts. The long lists of place names, and especially those of towns paying tribute to Montezuma, are all given by means of the rebus form. The simplest names are those compounded of two nouns which are expressed directly by two pictures. The verbal idea may also be shown in these place names. Position and color are also found to have phonetic values in some cases.

Where it is not possible to express the name by means of a picture, a homophone is used. The diminutive idea is shown by means of a picture of the legs of a man. The word for little is also the word for the lower part of a man's body. In the same way a homophone is used to express the idea of in, inside. The word for tooth is also the word for in, consequently teeth are drawn to express the latter idea.

In these place names there is the beginning of a syllabary. The signs are conventionalized and show often a stereotyped form. The adoption of certain signs to express certain united sounds is a step

far in advance of the stage of pure picture writing, and it is well on its way toward the adoption of an alphabet. We might possibly go a little farther in the case of the Mexican writing and say that the Nahuas had reached to a slight degree this final stage in their writing. I am inclined to think, however, that these people in pre-Columbian times did not realize the importance of the step which they were about to take, the use of signs for single sounds. The Spaniards were the ones who understood the importance of a syllabary, and it is undoubtedly owing to their influence that we find certain signs used in later manuscripts to express syllables absolutely for their phonetic value and entirely divorced from the signification of the signs as pictures. Moreover the Spaniards seem to have used, to some extent at least, the signs of the Nahuas to express single sounds.

The first credit belongs, however, to the ancient Nahuas who came quite independently upon the idea of the possibility of expressing the sounds of words by characters, an invention great enough to place them above the class of savages.

The following members of the Institute were in attendance at the General Meeting:

Of the Baltimore Society:

Miss Alice C. Fletcher, Washington; Dr. R. V. D. Magoffin, Johns Hopkins University; Professor C. W. E. Miller, Johns Hopkins University; Professor W. P. Mustard, Johns Hopkins University; Professor D. M. Robinson, Johns Hopkins University; Professor H. L. Wilson, Johns Hopkins University.

Of the Boston Society:

Professor G. H. Chase, Harvard University; Dr. W. D. D. Hadzits, Smith College; Professor W. F. Harris, Harvard University; Professor A. B. Hawes, Wellesley College; Mr. E. Jackson, Boston; Professor J. C. Kirtland, Exeter; Professor C. H. Moore, Harvard University; Professor G. F. Moore, Harvard University; Dr. A. S. Pease, Harvard University; Dr. K. K. Smith, Harvard University; Dr. A. M. Tozzer, Harvard University; Professor A. Walton, Wellesley College.

Of the Chicago Society:

Professor H. F. Allen, Champaign; Mr. A. V. Armour, Chicago; Professor W. G. Hale, University of Chicago; Professor G. J. Laing, University of Chicago; Professor E. T. Merrill, University of Chicago; Professor J. A. Scott, Northwestern University; Professor P. Shorey, University of Chicago.

Of the Cleveland Society:

Professor H. N. Fowler, Western Reserve University; Professor S. B. Platner, Western Reserve University.

Of the Colorado Society:

Mr. E. L. Hewett, Washington, D.C.

Of the Connecticut Society:

Professor F. C. Babbitt, Trinity College; Professor S. E. Bassett, University of Vermont; Professor T. D. Goodell, Yale University; Professor K. P. Harrington, Wesleyan University; Dr. W. H. Thompson, Jr., Yale University; Professor C. C. Torrey, Yale University.

Of the Detroit Society:

Professor F. W. Kelsey, University of Michigan; Professor H. A. Sanders, University of Michigan.

Of the Iowa Society:

Professor C. H. Weller, University of Iowa.

Of the New York Society:

Professor W. H. Goodyear, Brooklyn; Professor C. Knapp, Barnard College; Professor G. Lodge, Columbia University; Professor A. Marquand, Princeton University; Professor A. F. West, Princeton University; Professor J. R. Wheeler, Columbia University.

Of the Northwest Society:

Professor L. F. Anderson, Walla Walla.

Of the Pennsylvania Society:

Professor G. A. Barton, Bryn Mawr College; Professor W. N. Bates, University of Pennsylvania; Dr. G. D. Hadzsits, University of Pennsylvania; Miss E. C. McConnell, Philadelphia; Professor J. C. Rolfe, University of Pennsylvania.

Of the St. Louis Society:

Professor F. W. Shipley, Washington University.

Of the Washington Society:

Professor M. Carroll, George Washington University; Dr. J. W. Fewkes, Smithsonian Institution; Professor T. Fitz-Hugh, University of Virginia.

Of the Wisconsin Society:

Professor A. G. Laird, University of Wisconsin; Professor M. S. Slaughter, University of Wisconsin.

CANADIAN MEMBERS

Kingston Society:

Mr. W. B. Anderson, Professor T. Callander.

Montreal Society:

Mr. C. A. B. Brockwell, Professor A. J. Eaton, Principal Peterson, Mr. A. M. Thompson.

Ottawa Society:

Mr. H. M. Ami.

Toronto Society:

Mrs. Agar Adamson, Mr. H. W. Auden, Mr. D. Boyle, Mr. W. Craig, Mr. H. J. Crawford, Mr. G. Cross, Mr. R. Davidson, President R. A. Falconer, Mr. J. Fletcher, Mr. W. R. Henderson, Mrs. W. R. Henderson, Principal M. Hutton, Professor G. W. Johnston, Mrs. A. R. McMaster, Mr. W. S. Milner, Mr. H. Montgomery, Mr. F. A. Mouré, Mr. E. B. Osler, Mr. R. A. Reeve, Mr. J. C. Robertson, Mr. G. O. Smith, Mr. W. L. Symons, Mrs. W. L. Symons, Mr. B. E. Walker.

The sessions were attended also by many members of the Philological Association, of the Managing Committees of the Schools at Athens, in Rome, and in Palestine, by former members of the Schools, and by others—not members of the Institute.

The next General Meeting of the Institute will be held at Johns Hopkins University, Baltimore, during the Christmas holidays of 1909. The annual meeting of the American Philological Association will be held in conjunction with the meeting of the Institute.

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

WILLIAM N. BATES, *Editor*
220, St. Mark's Square, Philadelphia, Pa.

GENERAL AND MISCELLANEOUS

CYPRUS. — PAPHOS. — The Phoenician Aphrodite. — In *R. Arch.* XI, 1908, pp. 329–330 (fig.), CLERMONT-GANNEAU publishes a Phoenician inscription recently discovered at Kuklia (Old Paphos). In one of the four lines he reads *'Achtoret Paph.*

MALTA. — HAL-SAFIENI. — A Prehistoric Burial Place. — In *Z. Ethn.* XI., 1908, pp. 536–542, A. MAYR describes a newly discovered burial place at Hal-Safieni, north of the village of Tarsien, Malta (see *A.J.A.* XII, p. 79). Two series of rooms were found one above the other cut out of the native rock. There are six rooms in the upper story. They are large and round and have connected with them niches or small chambers which in some cases have been enlarged. Some of the ceilings have spirals painted on them in red. Many small figures, amulets, stone axes and knives, and potsherds were discovered. The figures have analogies both with the Aegean island figures and with those from the neolithic strata at Cnossus. The decoration of the pottery consists chiefly of linear designs scratched in and filled with some white substance. On one piece are animals with long horns. The writer dates the finds in the Mycenaean period. These discoveries are to be published in full by Dr. T. Zammit, curator of the museum at Valetta.

MONTENEGRO. — CETINJE. — Antiquities from Doclea. — In *Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 103–104 (fig.), C. PATSCH describes some antiquities from Doclea at Cetinje, of which the most important are two reliefs of Hermes Psychopompus. On one the god is advancing with a staff in his right hand and the kerykeion in his left and wearing a winged

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor BATES, Editor-in-charge, assisted by Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Mr. L. D. CASEY, Miss EDITH H. HALL, Mr. HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor FRANK G. MOORE, Mr. CHARLES R. MOREY, Dr. JAMES M. PATON, Professor LEWIS B. PATON, Dr. A. S. PEASE, Professor S. B. PLATNER, Professor JOHN C. ROLFE, Dr. N. P. VLACHOS, and the Editors, especially Professor MARQUAND.

No attempt is made to include in this number of the JOURNAL material published after December 31, 1908.

For an explanation of the abbreviations, see pp. 123, 124.

helmet. He is nude. The second relief is similar, but the god has a chlamys over his right shoulder.

NECROLOGY.—**Gaston Boissier.**—Gaston Boissier, who died June 10, 1908, at Viroflay (Seine-et-Oise), was born at Nîmes in 1823. He became professor of rhetoric at the Lycée at Nîmes, and was afterwards promoted to the École Normale and the Collège de France. He was the author of several historical works, the most important of which is perhaps *Cicéron et ses amis*, published in 1865. His chief archaeological works are *Promenades archéologiques*, *Nouvelles Promenades*, and *l'Afrique romaine*. He was remarkable for breadth of view and for the perfection of his style. (A. MEZIERES and S. R., *R. Arch.* XI, 1908, p. 401 f.)

Lewis Campbell.—Lewis Campbell, the distinguished Greek scholar, has died at the age of seventy-eight. His education was received at the universities of Glasgow and Oxford. In 1863 he was appointed professor of Greek at St. Andrews, becoming emeritus in 1892. His chief work was his edition of Sophocles. (*Nation*, November 12, 1908, p. 464.)

Albrecht Dieterich.—Albrecht Dieterich, who died at Heidelberg, May 5, 1908, was known especially as a brilliant worker in the field of comparative religion. His most important works are his *Eine Mithras-Liturgie* and his treatise *Mutter Erde*. He did especially valuable work as the editor of the *Archiv für Religionswissenschaft*.

Louis Dyer.—The *Nation*, July 23, 1908, records the death, on July 20, of Louis Dyer. He was born at Chicago in 1851, graduated at Harvard College in 1874 and at Balliol College, Oxford, in 1878. From 1881 to 1887 he was assistant professor of Greek at Harvard. From 1890 he lived at Oxford, lecturing at Balliol from 1893 to 1896. He was acting professor of Greek at Cornell University in 1895-96, and lecturer on art at the University of California in 1900. Among his works are *Studies of the Gods in Greece*; an edition of *Plato's Apology and Crito*, and articles in various periodicals.

Sir John Evans.—Sir John Evans died June 2, 1908, at the age of nearly eighty-five years. His works on *The Stone Age* (1872) and *The Bronze Age* (1881) in England are still the chief authorities on those subjects. His two publications on Celtic coins of Great Britain (1864, 1890) are also important. He was for many years president of the Egypt Exploration Fund. He published also researches in prehistoric archaeology, especially in connection with early systems of writing in Greece and neighboring regions. (S. R., *R. Arch.* XI, 1908, p. 404.)

Ernest Hamy.—November 19, 1908, occurred the death, at the age of sixty-six years, of Ernest Hamy, an indefatigable worker in the fields of anthropology, prehistoric and American archaeology, historical geography, and history of sciences. His works, *Crania Ethnica* (with Quatrefages), *Précis de paléontologie humaine*, *Décades américaines*, and *Galerie américaine du Trocadéro*, as well as numerous articles in periodicals, are well known. His name will always be connected with the museum of the Trocadéro, which he founded and of which he was director for many years. (S. R., *R. Arch.* XII, 1908, p. 304.)

Jean Réville.—Early in May, 1908, Jean Réville died while still a comparatively young man. He was the author of an excellent book on Religion in the time of the Severi, and succeeded his father, Albert Réville, as editor of the *Revue de l'histoire des Religions*. (*R. Arch.* XI, 1908, p. 403.)

TURKEY.—**Regulations concerning Antiquities.**—The Regulations concerning Antiquities, of 1907, valid throughout the Ottoman Empire, are published in full in *R. Arch.* XI, 1908, pp. 405-412.

CONSTANTINOPLE.—**New Acquisitions.**—The new halls, and new objects from Asia Minor installed in the Ottoman Museum at Constantinople in 1907, are reported upon by H. EDHEM BEY, in *Arch. Anz.* 1908, cols. 111-113.

EGYPT

ANIBEH.—**The Expedition of the University of Pennsylvania, 1907-08.**—The expedition of the University of Pennsylvania to Egypt, conducted by Dr. D. Randall-MacIver, in its second campaign, 1907-08, excavated a cemetery of about eight hundred tombs at Anibeh, about eighty miles north of Wadi Halfa. These tombs were of two kinds: (1) A vault of mud bricks at the bottom of a rectangular pit; or (2) a shaft 5 or 6 feet deep cut in the Nile mud with a burial chamber dug out like a cave, and closed at the entrance by a wall of bricks. Both kinds had a superstructure of mud brick, or of mud brick and stone, in the form of a table of offerings, in front of which was a small stone table of offerings inscribed in Nubian or Meroitic script. Above the tomb was often a painted or inscribed tombstone, and occasionally a statue, half man and half bird (Fig. 1). Great quantities of pottery, chiefly water jars and drinking cups (Fig. 2), were found. They are of a red clay and decorated with figures. Among the objects found are two interesting wooden boxes inlaid with ivory; two bronze bowls with Nubian scenes engraved upon them; about twenty statuettes of sandstone; and about one hundred finger rings. One hundred and twenty inscriptions in Nubian characters were discovered, but as yet cannot be read. Most of the objects date from the first five centuries A.D., although some of them may be earlier. The civilization was Negroid, but it shows Egyptian, Greek, and Roman influence. A large part of the material is now in the Free Museum of the University of Pennsylvania. (*Old Penn*, October 10, 1908, pp. 1-2; 3 figs.; also *Rec. Past*, VI, 1908, pp. 297-303; 4 figs.)



FIGURE 1.—STATUE FROM ANIBEH.

PYRAMIDS OF LISHT.—**The Expedition of the Metropolitan Museum.**—In *B. Metr. Mus.* III, 1908, pp. 170-173 (4 figs.), A. M. L.(ΥΓΗΓΟΕ) gives an account of the second year's work of the expedition of the Metropolitan Museum of New York at the pyramids of Lisht (see *A.J.A.* XI, p. 344; XII, pp. 84 and 354). The burial chamber in the pyramid of Amenemhat I could not be reached because of the water in the

shaft leading down from the upper chamber. Next year a steam pump will be set up for the purpose of clearing this shaft. A beginning was



FIGURE 2. — POTTERY FROM ANIBEH.

made upon the excavation of the second pyramid, that of Useresen I. Part of the causeway was cleared and the finely constructed wall which lines it on either side laid bare. Another Osiride statue of Useresen, like those discovered by the French, was found in the course of this work. On the south side of the pyramid the enclosure wall was uncovered. It is 2 m. thick and was originally about 5 m. high. The cemeteries adjoining the pyramid were also examined. *Ibid.* pp. 184-188 (6 figs.), further details are given of the work at the pyramid of Amenemhat I. Along the north side were found remains of a large village of the twenty-second dynasty and later, built close up to the pyramid. Below this were many blocks from the pyramid which had belonged to earlier structures. The pyramid was, in fact, built out of stones from mastabas of the Old Kingdom. The entrance to the pyramid was laid bare. Two foundation deposits have been found so far. One of the most interesting discoveries was the portrait head of a twelfth dynasty king, probably Amenemhat III.

MUSAWWARAT ES-SUFRA AND NAGA.—Description of the Ruins. — In *S. Bibl. Arch.* XXX, 1908, pp. 192-203 (6 pls.), P. D. SCOTT-MONCRIEFF reports a recent visit to the southernmost remains of the strange Negro-Egyptian civilization that flourished from the time when the priests of Ammon fled southward from Thebes down to the period when Egypt became a Roman province.

NUBIA.—The Expedition of the University of Chicago, 1906-1907. — In the last year the Egyptian Expedition of the University of Chicago completed a paleographic survey of the inscribed monuments of Soudanese Nubia (see *A.J.A.* XII, p. 84). The method employed in the field work was largely photographic. Large-scale negatives were made on the spot. Prints of these were also made, which were then collated with the originals, and any further readings discernible in the badly broken passages were inserted in colored inks directly on the photographic prints. This combination of the speedy and infallible camera with the paleographic experience of the trained eye, enabled the Expedition to work with great rapidity. Leaving Cairo in October, the Expedition was already at work upon the monuments of ancient Meroe by the first of November. The strange hybrid civilization of this remote Ethiopian kingdom was studied also in the remains of Naga and Musawwarat.

In late November the Expedition entered the rapids of the fourth cata-

ract, one hundred and forty miles long, which it traversed in eight days, being the first archaeological party to pass these waters. At the foot of the fourth cataract, two *gayassas*, kindly furnished by the Soudan government, received the party and their burdensome outfit. In these two boats the voyage through the Dongola Province of some six hundred miles was safely accomplished, all monuments on either bank being carefully recorded as the voyage proceeded. The larger boat was wrecked in the third cataract, and the stores and all records of the Expedition barely escaped destruction. This voyage demonstrated that there was no conquest of Upper Nubia in the Middle Kingdom (thirteenth dynasty) as heretofore supposed; and that Upper Nubia was not absorbed by the Pharaohs until the early Empire (eighteenth dynasty) under Thutmose I.

At the foot of the third cataract the Expedition discovered that the Temple of Sesebi, already known through Lepsius, was not erected by Seti I, as Lepsius reported, but by the great religious revolutionary, Ikhnaton. The reliefs on the columns of the Temple are palimpsest, and those of Ikhnaton are still faintly discernible through the superimposed records of Seti I. The place was thus identified as Gem-Aton, the religious capitol of Ikhnaton in Nubia, already known to have existed there from surviving documents of this king at Thebes. A series of unknown documents of the same king was also found at Soleb, architecturally only surpassed by the temple of Amenhotep III at Luxor.

Above the second cataract the Expedition left the government boats and the equipment and supplies were transferred to camels. The caravan journey, which, with stoppages caused by the work, consumed twenty-one days, brought the expedition safely to Halfa at the foot of the second cataract in March. At this point the work of the preceding season had begun and proceeded northward. The epigraphic survey completed by the Expedition in two seasons, therefore, extends from the southernmost monuments of the Nile through a thousand miles of river, northward to the Ptolemaic Temples immediately above the first cataract. It is hoped that the publication of the records secured by the Expedition will furnish a standard corpus of the monuments of Nubia. (J. H. BREASTED, 'The Monuments of Sudanese Nubia.' Report of the work of the Egyptian Expedition, season of 1906-1907, *A. J. Sem. Lang.* 1908, pp. 1-110; 57 figs.)

THEBES.—Recent Discoveries in the Valley of the Kings.—In *S. Bibl. Arch.* XXX, 1908, pp. 116-117, E. R. Ayrton describes the discovery by Mr. Davis of the tomb of Horemheb, the last king of the eighteenth dynasty. The tomb has been almost completely plundered, but numerous wooden figures of deities remain, and in the debris it is hoped that objects of interest will be found. In digging for this tomb a gold wig-pendant was discovered bearing the name of Seti II.

UPPER EGYPT.—Coptic Inscriptions.—In *S. Bibl. Arch.* XXX, 1908, pp. 142-144, A. H. Sayce describes a number of Coptic inscriptions on a sandstone hill opposite Kill Island that indicate that the rock was once a place of pilgrimage, and that a Christian shrine once stood there, the predecessor of the sheikh's tomb that now exists at the foot of the hill.

BABYLONIA, ASSYRIA, AND PERSIA

LAGASH.—*Lugalanda.*—In *Or. Lit.* XI, 1908, cols. 213-218, H. DE GENOUILLAC publishes a tax-list dated in the first year of King Urukagina, in which his predecessor, Lugalanda, is mentioned under the title of "Great Patesi." It seems to indicate that, although Lugalanda was dethroned by his successor, who assumed the title of King, yet he was allowed to retain his ancient title of Patesi, and seems to have received a pension from his successor.

TELL HALAF.—*Recent Explorations.*—In *Der Alte Orient*, X, 1908, Pt. I, pp. 1-43 (plan; 15 figs.), M. VON OPPENHEIM describes the explorations undertaken by him in the year 1899 at Tell Halaf, south of Mardin in Mesopotamia. Only a few trenches were dug, but these resulted in the discovery of an important Hittite centre. A number of small stone tablets were found on which in high relief figures of men and of animals were depicted; also large statues of animals, a capital, or base, of a column with ornamentation of pendent leaves. Most interesting of all was the figure of a veiled goddess, representing probably the great mother-goddess of the Hittites.

SUSA.—*The Recent Excavations.*—In *C. R. Acad. Insc.* 1908, pp. 373-379, J. DE MORGAN reports upon the discoveries made at Susa during the last campaign (see *A.J.A.* XII, p. 85). The most ancient remains were found 24 m. below the surface. They consist of a piece of fortification wall of beaten clay, a few traces of dwellings, and, outside the enclosure, a necropolis. A large number of graves were opened. About the head of the dead were placed from three to five painted vases. The men's graves often had copper celts of a primitive type, and a few of the women's had copper mirrors. Necklaces ornamented with turquoise are proof of the commercial activity of the people. There were found several seals and a seal impression, and about two thousand painted vases, of which half are now in the Louvre. De Morgan dates this settlement about 5000 B.C. Ten metres above this stratum are found the proto-Elamite tablets which are dated by Scheil at the beginning of the fourth millennium. Twelve metres from the surface the remains of a very ancient temple were discovered. Several monuments with the name of Karibou-cha-chouchinak supply the date. The statue of this king was found with two inscriptions, one in archaic cuneiform characters giving the king's names and titles, and the other in proto-Elamitic writing. It has not yet been determined whether the second inscription is a translation of the first. The head is broken, but otherwise this statue is perfectly preserved. Among the other objects found were many small and medium-sized statues, bas-reliefs, stamped bricks, several hundred tablets, and more than one hundred seal cylinders. In the centre of the mound a great brick stairway was found and this had been followed for 120 steps up to the time when work for the season closed.

SYRIA AND PALESTINE

REMAINS IN ARABIA-PETRAEA.—In *Mélanges de la Faculté Orientale*, Beyrout, III, pp. 385-436 (7 pls.; 55 figs.), B. MORITZ describes the results of an archaeological exploration conducted in Ma'an, Petra, Greye, and Quasr 'Amra. He gives also a large number of Arabic inscriptions from these various localities.

GEZER.—**The Latest Excavations.**—In *Pal. Ex. Fund*, XL, 1908, pp. 200-218 (3 pls.; 4 figs.), R. A. S. MACALISTER reports on the excavations that have been carried forward from February 11 to May 9, 1908 (see *A.J.A.* XII, pp. 86-97, 357). In débris, contemporaneous with the nineteenth Egyptian dynasty, a large stone was found inscribed with the Egyptian hieroglyphic sign *nb*, "gold." This stone must have stood in a structure partially covered with hieroglyphics. It cannot have been imported from Egypt, but must have belonged to some edifice erected in Gezer itself. It gives additional evidence of the extent of Egyptian rule in Palestine, that a building should have existed in Gezer bearing a hieroglyphic inscription in characters of colossal size. Three graves have also been found disclosing a new type of interment. The bodies were placed in horseshoe-shaped enclosures of stone about 6 feet long and 3 feet broad. Along with one of the bodies was found a complete skeleton of a goat. Pottery found in connection with these graves is of a peculiar type of light brown ware with faint burnishing and lines of black or dark sepia. Another foundation-sacrifice contemporaneous with the twelfth Egyptian dynasty has also been discovered. One of the bodies in this deposit had been cut in two, like similar sacrifices found in Gezer and elsewhere in Canaan. A seal of a type similar to the so-called "zodiacal tablet" has been found in a stratum dating from about 2500 B.C., thus confirming the opinion that the "zodiacal tablet" was stamped from a cylinder that belonged to an earlier level than that in which the impression was found. Among the smaller objects a tablet containing the impression of the left foot of a child about three years old, and an Egyptian incense-burner, are the most interesting. Several caves in the rock beneath the mound have been opened, and one contains a number of rock scribbles of the neolithic period. These consist, first, of an arrangement of lines; second, of circular dots; and third, of drawings of animals. They bear a close resemblance to the palaeolithic sketches that have been found in various places.

In the same number of the *Pal. Ex. Fund* Father HUGUES VINCENT of Jerusalem discusses the significance of the tunnel described in a previous report of the excavations of Gezer. He regards it as one of the most important finds that have been made in the mound, as an evidence of the engineering skill of the people who lived upon the hill between the twentieth and eighteenth centuries B.C., and also because of the light that it throws upon the meaning of the tunnel excavated in the east hill of Jerusalem. With the name *Šinor*, which is applied to the tunnel of Jerusalem in 2 Sam. v. 8, he compares the legend current in Gezer of a *tannur* or "oven" from which the deluge issued.

ASIA MINOR

A JOURNEY THROUGH ASIA MINOR.—In *Annals of Archaeology and Anthropology* of the University of Liverpool, I, 1908, pp. 1-12 (map; 14 pls.; fig.) J. GARSTANG gives a brief account of a journey from Angora to Aleppo made in the early summer of 1908. Many Hittite monuments were examined and inscriptions recopied. Two Roman milestones were found, one at Yavash-ova Khan and the other at Eski Yapan. At Tyana seven fragments of a large black stone with an archaic Phrygian inscription were discovered.

INSCRIPTIONS FROM ASIA MINOR, CYPRUS, AND THE CYRENAICA.—Forty-two inscriptions which were copied in Asia Minor, Cyprus, and the Cyrenaica in the spring of 1904 by D. G. Hogarth, R. Norton and A. W. Van Buren, are published in *J.H.S.* XXVIII, 1908, pp. 180-201 (3 figs.). Many give correction of inscriptions already published; some are mere fragments. Among the more complete is one from Side in Pamphylia, which gives considerable information about the local Jewish community, at some epoch later than the time of Constantine. It seems to have been large and flourishing, requiring at least two synagogues.

PONTUS, CAPPADOCIA, AND CILICIA.—*New Inscriptions.*—In *Mélanges de la Faculté Orientale de l'Université Saint Joseph*, Beyrout, III, 1908, pp. 437-477, P. G. DE JERPHANION and P. L. JALABERT publish seventy-three new inscriptions from Pontus, Cappadocia, and Cilicia. Of these eight are Latin, the rest Greek. They are chiefly sepulchral inscriptions and of interest for the proper names.

CAPPADOCIA.—*Two New Hittite Monuments.*—In *S. Bibl. Arch.* XXX, 1908, pp. 42-44 (2 pls.), G. DE JERPHANION describes two monuments discovered by him last summer in a trip through Asia Minor. The first, known as Arslan Tach, or the Lion's Stone, is situated on the lofty mountain of Soghan Dag; the other was found near the Greek village of Tachdji, only 13 km. from the well-known Hittite reliefs of Fraktin. Both contain figures and brief Hittite inscriptions.

EPHESUS.—*Recent Excavations.*—In *Jh. Oest. Arch.* I. X, 1908, Beiblatt, cols. 61-78 (2 plans; 3 figs.), R. HEBERDEY gives an account of the excavations at Ephesus in 1905 and 1906. The colonnade on the east side of the paved road was cleared and numerous inscriptions found. The road itself has now been uncovered from the south side of the theatre to the octagonal building. Where the ramp, which leads up from the place in front of the library, joins the paved road the foundations of a circular building of the Hellenistic period have come to light; and to the south of this are remains of a large building not yet understood. Near the octagonal building several pieces of sculpture in relief were discovered. Among the late inscriptions was one of the Byzantine emperor Tiberius and another of Heraclius. The excavation of the church of St. Mary was completed.

EUYUK.—*Recent Excavations.*—In *Mitt. Vorderas. Ges.* XIII, 1908, pp. 177-205 (2 pls.; 40 figs.), T. MACRIDY-BEY describes excavations recently carried through by him for the Ottoman Museum at the expense of Herr Mühlberg. Only fifteen days were spent in excavating, but these served to correct certain mistakes in the superficial observations of earlier investigators, and to disclose two large and beautiful specimens of Hittite reliefs. An exact plan of the mound was also made, and the precise location of various archaeological objects fixed upon it for the use of future explorers in case the mound is investigated more thoroughly.

IN-BAZAR.—*Grottoes.*—In *Z. Ethn.* XI, 1908, pp. 383-389 (18 figs.) E. BRANDENBURG announces his discovery at In-Bazar in Phrygia of a number of grottoes hewn out of the natural rock. These are briefly described. Some of them are unfinished, which seems to show that a sudden calamity overtook the settlement and brought it to an end.

MILETUS AND DIDYMA.—*Excavations of 1906 and 1907.*—The sixth preliminary report of the excavations at Miletus and Didyma, by T.

WIEGAND (46 pp.; 6 pls.; 15 figs.; 4to; supplement to *Abh. Berl. Akad.* 1908), records the work of 1906 and 1907. At Miletus important remains of the archaic city were discovered; the Hellenistic gymnasium, the Roman bath, and the Ionic portico at the Lion's Harbor were further investigated, as were also the baths of Faustina. Inscriptions relating to these buildings and to various cults are published. The early Christian basilica near the Asclepieum was carefully studied. At Didyma the space about the temple was cleared, arrangements for housing the excavators and for carrying on the work were perfected, and the task of excavation was begun. The Corinthian semi-capitals, which had not been seen since 1764 (*Antiquities of Ionia*, pls. ix, x), were rediscovered, and several inscriptions came to light, among them a large fragment of the Laodice inscription (Haussoullier, *Études sur l'histoire de Milet et du Didymeion*, pp. 76 ff.) and fragments of building accounts. Remains of five seated statues have been found by the sacred way, where C. T. Newton found those now in the British Museum. The sacred way is about 5 m. wide. Along both sides of it are remains of Roman tombs.

SAKTJEGÖZY. — *The Discovery of a Temple.* — J. Garstang, of the University of Liverpool, has discovered an ancient temple at Saktjegözy in Asia Minor. It is surrounded by a wall 2 m. thick, the main gate of which is decorated with lions and winged human-headed quadrupeds with tails ending in birds' heads. The work is believed to be Hittite of the eighth century B.C. Within the temple was much broken pottery including some Minoan fragments. (*Athen.* October 24, 1908, p. 517; *Nation*, November 5, 1908, p. 449.)

GREECE

ATHENS. — *A Decree of the Third Century.* — In *Klio*, VIII, 1908, pp. 487-488, J. KIRCHNER publishes an Attic decree of twenty-seven lines found at the Areopagus in 1906. It is a vote of thanks to the prytaeis for performing certain sacrifices. It is dated in the archonship of Lysanias, who is believed to have held office in the year 235-234 B.C.

CRETE. — **CNOSSUS.** — *New Excavations.* — In March, 1908, excavations were renewed at Cnossus in the large palace and in the small palace to the west. The latter covered an area of over 9400 square feet and was at least two stories high. Objects found in it show that it was founded toward the end of the Middle Minoan or early in the Late Minoan period. Among other discoveries is a finely executed steatite vase in the form of a bull's head, with incrustated nostrils and inserted eyes of rock crystal. In the large palace a large corridor or cryptoporticus extended along the southern front to a building of the Middle Minoan period. Between this and the remains of a building on a lower plane are many blocks of stone and also objects which seem to have fallen from the rooms of the palace with the falling blocks. Among these objects are a bronze votive idol, fragments of jars marked with the double axe and horns of consecration, fine specimens of the last period of "palace style" pottery, and fragments of stucco painted with patterns and human figures. Several fragmentary specimens of metal work, a box containing the materials used in mosaics, and some ivories, on one of which a griffin and a bull are carved, were also found. The building, of the end of the Middle Minoan period, the erection of which caused the

interruption of the cryptoporticus, was solidly built and had door-jambs of stone. In it were found a collection of silver vessels and a deposit of bronze weapons and utensils, including three saws. In a second building, to the east, were even more objects of bronze: a large ewer, a basin, three caldrons with tripods, and a saw six feet long. Other bronze objects were found in a house near the northern end of the palace, among them a caldron with tripod. The excavation of the great crypt in the rock under the great southern entrance advanced but little. Enough has been done here to indicate that further investigations will give valuable information concerning the end of the Early Minoan period. In a Middle Minoan house near the southern façade earlier foundations were found, and among them fragments of Early Minoan pottery. The discoveries here agree with those of R. B. Seager at Mochlos, where miniature stone vases were found, and fine gold ornaments of the Middle Minoan period which seem to be precursors of those found at Mycenae. The architectural history of the palace at Knossos is now more firmly established. Various repairs, for the preservation of the remains, have been made. (A. J. EVANS, *London Times*, August 27, 1908; cf. A. J. REINACH, *R. Arch.* XII, 1908, pp. 288-293.)

CRETE.—PHAESTUS.—A Disk Inscribed with Pictographic Signs.—In *C. R. Acad. Insc.* 1908, pp. 478-479, S. REINACH announces the discovery in the remains of a building northeast of the acropolis at Phaestus of a terra-cotta disk, 16 cm. in diameter, covered with pictographic signs consisting of men, fish, birds, trees, and plants. There are more than one hundred and twenty of these signs on each side of the disk. They start at the centre and run in a spiral to the edge, and were not scratched in but put on with a stamp. Some of the signs are identical with those found by Evans on Cretan gems. This is the first piece of hieroglyphic writing of any length found in Crete.

CRETE.—VASILIKI.—The Excavations of 1906.—In *Transactions of the Free Museum of Science and Art*, University of Pennsylvania, II, 1908, pp. 111-132 (3 pls.; 2 plans; 11 figs.), R. B. SEAGER makes a report upon his excavations at Vasiliki in 1906. He distinguishes in the remains three periods which correspond to Evans's Early Minoan II and III and Middle Minoan I. The mottled ware characteristic of the site was found in all the periods, but it appears to be dying out in the third. Vases of the same kind have been found at Angora in Asia Minor, which may point to some connection with that region. Two houses were found fairly well preserved, in one of which was a well 8 m. deep cut in the rock. Many complete vases were discovered in this, chiefly small, low cups with white decoration on black, belonging to the Early Minoan III period. Many of them are very thin. Some show a mixture of styles, the upper and lower parts having a white decoration on black, while in the middle is a band of polished buff clay. In another house of the Middle Minoan I period a deposit of fifty-seven vases of a new style was found. They have the shapes of cups from Palaikastro, but are of a buff clay covered with a colorless paint upon which are geometrical designs in brown and black. Among the other objects found were some fine specimens of obsidian knives, one of which is 9 cm. long. At Hagios Theodoros near by a beehive tomb 2 m. in diameter and 1.80 m. high was discovered. It had been plundered in antiquity, but still contained a well-preserved larnax, 1.50 m. long, and

fragments of vases which date it at the end of the Late Minoan III period.

DELOS.—**Excavations along the East Wall of the Temenos.**—In *B.C.H.* XXXI, 1907, pp. 471-503 (pl.: 16 figs.), L. BIZARD reports on excavations conducted by him in 1904, 1906, and 1907 along the east wall of the temenos of Apollo. A street was laid bare with a line of houses bordering it on the west, most of them having small shops opening on the street. At the south end is the house of Cerdon with a court surrounded by a peristyle. Near the north end is a rectangular exedra, in which were found several pieces of sculpture relating to the cult of Dionysus.

DRAGANO.—**Sacred Laws of Achaea.**—In *Ἐφ. Ἀρχ.* 1908, pp. 95-102, ANTONIOS CHR. HATZES publishes an inscription found near the village of Dragano (about fifteen miles southwest of Patras), which records a law forbidding women, at the festival of the Demetria, from wearing elaborate or colored garments or more than an obol's weight of gold ornaments, from using cosmetics, and from playing the flute. Only two other such sumptuary laws are known; cf. Dittenberger, *Syll.*² Nos. 653 and 939. The dialect is Aeolic (Achaean).

HALMYROS.—**Inscriptions.**—Nine inscriptions, eight in the museum at Halmyros, one at Nea-Anchialos, are published by N. I. GIANNOPOULOS in *Ath. Mitt.* XXXIII, 1908, pp. 291-294. Nos. 1, 2, and 4 are contained in *I.G.* IX, 2 (1122, add. 1325, add. ult. 1362); the rest are new, nos. 3, 5, 6, 7, 9 being gravestones, 8 a fragmentary manumission inscription.

KAKOVATOS.—**Three Beehive Tombs.**—In *Ath. Mitt.* XXXIII, 1908, pp. 295-317 (3 pls.; 5 figs.), W. DÖRPFELD describes the three beehive tombs excavated by him in 1907 and 1908 at Kakovatos in Triphylia, the site of the Homeric Pylos. The tombs lie on the northwest slope of the hill on what was, without doubt, the main road from the sea to the fortress. All three were plundered in antiquity and have in modern times been used as quarries. Only the lower portions of the walls remain, built of flat slabs of limestone laid in clay mortar. Tomb A is the largest and the best preserved. It has a diameter of 12.12 m. The slabs of the wall are not horizontal but slant inward, thus approaching the system of a true vault. There are remains of the facing of the door, composed of larger stones, and of the dromos, which was 8 m. long. The lintel was of conglomerate. Within the circle, as also in Tomb C, a shaft grave was found. Tomb B (diameter 9 m.) has a carefully constructed paved floor. Tomb C (diameter 10.35 m.) lies almost on the top of the ridge, and its floor is only 1 m. below the natural ground level. Like the tops of the other two, it was doubtless covered by a mound of earth. All three tombs belong to the same period, the occurrence of Late Minoan II pottery dating them not later than the middle of the second millennium B.C. Tomb C, which lies nearest to the citadel, is presumably the earliest, Tomb A, the furthest removed, is the latest. The publication of the finds is reserved for a later article.

KLEIDI.—**The Homeric Arene.**—In *Ath. Mitt.* XXXIII, 1908, pp. 320-322, W. DÖRPFELD announces the discovery of a prehistoric settlement on some hills, now called Kleidi, between Samikon and the seashore, and identifies it with the town Arene, described in *Iliad*, XI, 723 as lying between Pylos and the Alpheus. Excavations revealed a cyclopean fortress wall connecting two of the hills and pieces of a city wall. The pottery

includes prehistoric hand and wheel made ware such as is found in Pylos, Olympia, and Leucas, and numerous fragments of vases of the Cretan palace style. At Samikon itself no remains earlier than the classical period have yet been found.

KOMBOTHEKRA.—**A Sanctuary of Artemis Limnatis.**—In *Ath. Mitt.* XXXIII, 1908, pp. 323-326, K. MÜLLER gives a preliminary report on the excavations conducted by him and F. Weege on a hilltop north of Kombothekra in Triphylia. A Doric peripteral temple of about the size of the Metroon at Olympia was found. The walls were of crude brick on a low base of irregular limestone blocks. Within the colonnade there is a portico in antis before a cella measuring 4 × 6 m. In an adyton back of this a number of votive offerings came to light. The colonnade, the material of which was *poros*, was a later addition. The columns were unfluted; there were three metopes to an intercolumniation. Among the finds which are to be published later was a bronze mirror with the inscription *καρὸν Ἀράματος Λιμνάτιος*.

LACONIA.—**Topography.**—In *B.S.A.* XIII (Session 1906-07), pp. 219-237 (plan), E. S. FORSTER describes, with some discussion, the topography and ancient remains of 'Gythium and the Northwest Coast of the Laconian Gulf.' In the museum at Gythium the only objects of special interest are a head of a youth of coarse marble, apparently a work of the third century B.C., and a small statuette representing a seated and draped human figure with a ram's head, doubtless Apollo Karneios. *Ibid.* pp. 238-267 (3 figs.), A. M. WOODWARD describes and discusses the topography and monuments of 'Taenarum and Southern Maina.' He adds a bibliography of the ancient and modern authors who mention this region, publishes four new inscriptions (three epitaphs and one dedication to Dionysus), and a list of previously published inscriptions from the Maina. One of these (Leake, *Travels in Morea*, Vol. III, No. 29) he publishes in full. Leake's copy is very defective. The stone contains apparently a short letter from one city to another, which includes a copy of a long resolution on the occasion of the death of an illustrious citizen. The name Damarmenidas, which is known only from *C.I.G.* 1389, may indicate that the inscription belongs to the first half of the first century A.D.

PHTHIOTIC THEBES.—**Recent Excavations.**—Excavations carried on at Thebes in Phthiotis by A. S. Arvanitopoulos show remains of four towns, one above the other. The prehistoric town was the largest, and its most flourishing days were during or before the Middle Minoan period. It seems to have existed from the third millennium to about 1500 B.C., when it was destroyed by a semi-barbarous race. A few centuries later another barbarous race, perhaps the first Dorians, sacked it. About 800 B.C. the site was resettled, the acropolis fortified, and a wall built about the lower town. Large quantities of bronze offerings, terra-cottas, and pottery date from this period. The historical Greek town was founded in 425 and destroyed in 217 B.C.; while the Byzantine town dates from the fourth century A.D. (*Hellenic Herald*, II, 1908, pp. 179-180.)

PIRAEUS.—**An Inscription of King Epiphanes Nicomedes.**—In *Jh. Oest. Arch.* I, XI, 1908, pp. 75-82 (fig.), A. WILHELM publishes, with comment, the following inscription of Epiphanes Nicomedes, king of Bithynia from 149 to about 95 B.C., now in the museum at Piraeus: *ΒΑΣΙΛΕΥΣ*

Ἐπιφανὴς Νικομήδης βασιλέως Προυσίου θεᾷ βασιλίσσῃ Ἀπάμῃ τῇ ἑαυτοῦ μητρὶ τὸ ἱερὸν ἄστυλον.

PISA.—Recent Excavations.—Excavations at the foot of the hill situated 1 km. to the east of the Altis at Olympia, and identified in classical times as Pisa, have brought to light remains of small walls and prehistoric sherds like those found at Olympia, Pylos, and Leucas, but no Mycenaean ware. (W. DÖRPFELD, *Ath. Mitt.* XXXIII, 1908, pp. 318–322.)

RHITSONA.—Sixth Century Graves.—In *Cl. R.* XXII, 1908, p. 198, a brief account is given of the excavations of P. N. Ure at Rhitsona in Boeotia. Seven rich graves were opened dating from shortly before 500 B.C. Each grave contained quantities of pottery and figurines besides other objects. Among these was a bronze tripod with the remains of an iron bowl with bronze handles, part of a silver phiale, and several feet of vases with incised inscriptions. The graves were 3 m. deep and had no stone slabs or covering. A series of Hellenistic graves containing figurines of the Tanagra class and a quantity of black glaze vases were also found.

SPARTA.—Excavations in 1907.—In *B.S.A.* XIII (session 1906–1907), pp. 1–218 (7 pls.; 82 figs.), the excavations carried on at Sparta in

B.S.A. Vol. XIII (1906–7), Pl. II

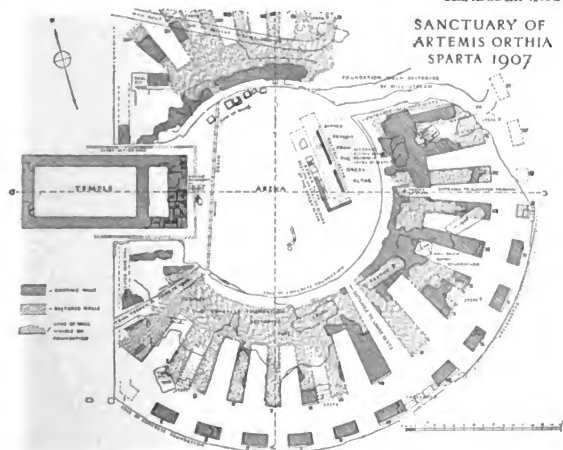


FIGURE 3.—SANCTUARY OF ARTEMIS ORTHIA.

1907 by the British School at Athens are described (see *A.J.A.* XII, p. 366). R. M. DAWKINS (pp. 1–4) gives a brief account of the work and a summary of results. A. J. B. WACE describes the remains of the city wall, the entire circuit of which has been followed. The wall consisted of a stone base with

a superstructure of unbaked brick roofed with tiles. The towers were always about 28 m. apart, but varied in shape; some being almost square (6 m. $\times$ 7 m.), others long and narrow (3.70 m. $\times$ 8 m.). The stamped tiles are treated by A. J. B. WACE (pp. 17-43). They are stamped with the name of the factory from which they come, with the name of the



FIGURE 4. — IVORY FIBULA-PLAQUE.

patronomus for the year (some bear the name of King Nabis), and are sometimes further designated as public and as intended for the walls or for reserve and repair work. With their aid a partial list of patronomi for the second and first centuries B.C. can be made. Tiles with the inscription Πιτανίαν, found west of the theatre, fix the site of the town of Pitane. The Sanctuary of Artemis Orthia (Fig. 3) is described by R. M. DAWKINS (pp. 44-108). Here the Roman theatre, the seats of which were supported on a system of radiating walls, between which were arches, passages, stairs, etc., was built partly around the temple. The altar was entirely within the orchestra or arena. The temple in use when the Roman theatre was built (second century A.D.) was of Hellenistic date (probably 178 B.C.), erected upon the foundation of a temple of the sixth century B.C., few remains of which have been found. The strata of sand, building chips, etc., are of great assistance in determining dates. Pottery of geometric, Protocorinthian, and orientalizing styles, objects of amber, statuettes and other objects of bronze, many very interesting carved ivories, and figurines of lead were found in great quantities. The ivories (Figs. 4, 5), many of which were fibula-plaques, are treated with some detail and assigned to the seventh and eighth centuries B.C. The altar, which was about 9 m. long by 1.50 m. wide, is of very early origin. Slight remains of a very early building indicate that before the temple of the sixth century B.C. was built, a still earlier temple existed near the altar.

J. P. DROOP (pp. 109-117) describes the early bronzes, which he classifies as pins, geometric statuettes of animals, fibulae, and miscellaneous. He also describes (pp. 118-136) the early pottery, — geometric, sub-geometric, Protocorinthian, and orientalizing. The geometric ornamentation is for the most part very simple, consisting chiefly of parallel straight lines, though other patterns occur. The clay is fine, pink, biscuit-colored, or gray. Some of the sherds have a slip, either white or of a light biscuit color. The metallic sheen of the black pigment is noticeable. The fragments all seem to be from small vases. The fragments from the Acropolis



FIGURE 5. — IVORY PLAQUE.

are in general earlier than those from the sanctuary of Artemis Orthia and resemble those from the Amyclaeum. A few sherds, chiefly from the sanctuary of Artemis Orthia, show human figures and heads. These are classed as sub-geometric. The Protocorinthian ware was imported in the geometric period. The orientaling ware resembles the Cyrenaic pottery, and some specimens of Cyrenaic ware were imported. The geometric ware found on the Acropolis may go back to the tenth century B.C. and the orientaling style ends in the earlier half of the sixth century.

The Hieron of Athena Chalcioecus is described by G. DICKINS (pp. 137-154) who first discusses the history of the sanctuary, and assigns the tripods of Gitiadas to the latter part of the seventh or the early part of the sixth century. The hieron lies on the western spur of the Acropolis hill above the ancient theatre. Few remains of any building, except part of the wall of the enclosure, were uncovered, but sherds of pottery extending from the geometric period to Roman times were found. A bronze statuette of a trumpeter (Fig. 6) is an excellent specimen of work of the middle of the fifth century. An archaic bronze statuette of Athena may be a copy of the statue by Gitiadas. A curious archaic bronze statuette of Aphrodite (?) represents the goddess draped and wearing a high headdress. In her hands she holds to her bosom some spherical objects, perhaps apples. Fragments of seven Panathenaic amphorae were found, and one of these is almost complete. On the reverse is a spirited representation of a four-horse chariot nearing the goal. Below the painted scenes a dedication to Athena is scratched in large letters. Apparently it was customary at Sparta to dedicate Panathenaic amphorae to the goddess. Various objects of bone, ivory, lead, marble, etc., were found at this site.



FIGURE 6.—
BRONZE STATUETTE,
TRUMPETER.

Four tombs, discovered in the level ground between the Acropolis hill and the northern limits of the modern town are described, with their contents, by A. J. B. WACE and G. DICKINS (pp. 155-168). These tombs are carefully built of large blocks of stone. Three belong to the Hellenistic age, while one, now almost totally destroyed, was probably earlier. The bodies were interred in these tombs without coffins. Among the objects found here are lamps, amphorae, and other vases, which are discussed at some length. At least one of these tombs was in use toward the end of the first century B.C.

A small sanctuary on the road to Megalopolis is described by G. DICKINS (pp. 169-173). A small part of the precinct wall and a portion of a small Doric column alone remain, but pottery indicates that the shrine was most frequented from the middle of the seventh to the middle of the sixth century B.C., and survived as late as the third or second century B.C. Besides pottery, figurines of terra-cotta and lead and various other objects were found here.

H. J. W. TILLYARD (pp. 174-196) publishes 23 inscriptions, besides brick stamps of six different types. Fourteen inscriptions, mostly fragmen-

tary, are from the temple of Artemis Orthia. These are all, or nearly all, dedicatory. Eight inscriptions, chiefly fragments, from various sites offer little of interest, except that one (No. 46) records the death of a Spartan soldier in a war against the Parthians, probably in 214 A.D. The most important inscription is a long fragment (53 lines) of the Damonon inscription (Roehl, *I.G.A.* 79; Roberts, *Introd. to Gr. Epigr.* I, No. 264; Tod, *Sparta Mus. Cat.* No. 440). The inscription may be dated not long before 431 B.C. It records the various victories of Damonon and his son Enymacritidas. The occurrence of this latter name disposes of the theory that the victories of a woman (Enymacrita) are recorded. The new fragment was found in the foundations of a late Roman building on the Acropolis, in the ruins of the temple of Athena Chalcioecus. A. M. WOODWARD (pp. 196-208) publishes three fragmentary inscriptions from the sanctuary of Artemis Orthia, notes on inscriptions already published, and prosopographical evidence for the dating of the Orthia inscriptions. He has succeeded in making a complete list, with only a few uncertain dates, of the patronomi from 117 to 135 A.D. H. J. W. TILLYARD and A. M. WOODWARD (pp. 208-212) give the new readings for twelve inscriptions copied by Fourmont, the originals of which were discovered in the excavations. Three new inscriptions recording victories of *σφαυρεῖς* are published by M. N. TOD (pp. 212-218). On the stone above one of them is a representation of the Dioscuri in low relief. They stand facing each other, wearing *πίλοι* and carrying lances upright. They are clad only in the *chlamys*. On a square base between them stands an amphora, above which are the *δόκαρα*, two vertical joined by two horizontal beams in the middle and at the top. The upper horizontal beam is decorated with an egg between two snakes. In the gable above is a large round object, evidently the ball of the *σφαυρεῖς*.

THASOS. — Classical Remains. — In *Ath. Mitt.* XXXIII, 1908, pp. 215-246 (3 pls.; 7 figs.), C. FREDRICH gives an account of a journey in Thasos, with an enumeration of the remains of classical times found by previous explorers. He devotes special attention to the walls of the town of Thasos, distinguishing four periods, the earliest being towards the end of the sixth century B.C. An archaic female head found in the necropolis is reproduced, as is an archaic terra-cotta antefix representing a gorgoneion.

LIMENAS. — A Greek Funerary Relief. — In *C. R. Acad. Insc.* 1908, pp. 477-478, S. REINACH publishes a brief account from Hamdi Bey of a Greek funerary relief from Limenas, the seaport of Thasos. The dead man is reclining and holding in his extended right hand a cup. At the left a nude youth holds a vase which he has just filled at a large bowl. At the right is a seated woman. The man's face resembles that of Atlas on the Olympia metope. The relief is finely carved and perfectly preserved and probably dates from the middle of the fifth century B.C. It is now in the museum at Constantinople.

THEOTOKOU, THESSALY. — Ancient Remains; a Byzantine Church. — In *B.S.A.* XIII (Session 1906-1907), pp. 309-327 (2 pls.; 14 figs.), A. J. B. WACE and J. P. DROOP describe excavations at Theotokou, on the Magnesian promontory, to the north of the bay of Kato Georgi. This is the traditional (but probably not the real) site of the ancient Sepias. Here some metope and triglyph blocks and parts of some Doric columns were found, as well as some ancient walls, which may have belonged to the same

edifice. In that case it was probably a small temple. Fragments of painted antefixes are attributed to the fifth century B.C. The ruins of the Byzantine church were excavated. This was of the basilica type, with apse, narthex, exonarthex, front porch, and additional rooms. It contains some fine mosaics and, by means of these and of coins found in it, is dated in the fifth century A.D. A simpler church of the same type is at Lai, near Neochori, a day's journey distant. Three tombs, built of stone slabs and containing bones, fibulae, etc., and vases were found. The vases are geometric and of rude fabric. Two similar groups are known, one from tholos tombs near Marinariani, to the north of Larissa, the other from two tombs in Skyros. All probably date from the beginning of the geometric period.

ZERELIA.—**Recent Excavations.**—Excavations carried on by A. J. B. WACE and J. P. DROOP have shown that the mound at Zerelia in Thessaly was an important prehistoric site. Near the surface were found potsherds of the fourth century B.C., as well as fragments of the Byzantine period, but below to a depth of 8 m. were prehistoric settlements. There are six well-defined strata. The settlements consisted of mud-brick and wattle houses. The lower layers contained stone implements, but no objects of metal; and the pottery consisted of handmade vases, some of which were red, others decorated with red patterns on a white ground. Along with these were found fragments of the cream-colored Thessalian neolithic ware. Near the topmost layers were sherds of true Mycenaean ware. The lowest settlements probably date from 3000 to 2500 B.C. (*Hellenic Herald*, II, 1908, p. 134.)

ITALY

AGRO CAPENATE.—**Ancient Brick Kiln.**—In the Agro Capenate, 2.5 km. from Leprignano, an ancient brick kiln has been discovered, which furnishes new material for the study of the technique of brick making. (*Rend. Acc. Lincei*, XVII, 1908, p. 90.)

ALANNO (VESTINI).—**Axes of the Bronze Age.**—A hoard of nine bronze axes of the usual type, with raised margins, was found in September, 1907, in the territory of Alanno. A description of seven, with weights and measurements, is given by G. PELLEGRINI in *Not. Scav.* 1908, pp. 114–116.

AMITERNUM.—**A New Inscription.**—In the village of Coricello, near Amiternum, a votive altar has been found, dedicated by M. Lurius Anicetus to the Lar Comp(italis). Besides the topographical importance of the inscription, dedications to a single Lar are rare and belong to the period before Augustus. (*Rend. Acc. Lincei*, XVII, 1908, p. 348.)

AREZZO.—**A Statuette of Mars.**—Explorations have been made near the piazza di S. Maria in Gradi, and in the adjoining garden, where the famous *figulina* of M. Perennius was situated. Only scanty traces of this were found, but some objects of value were discovered, including a statuette of Mars brandishing a spear, of a somewhat archaic style. (*Rend. Acc. Lincei*, XVII, 1908, p. 212.)

ASCIANO.—**The New Mosaic.**—The mosaic discovered at Asciano, in the Province of Siena, has been completely uncovered, showing geometric designs of an uncommon pattern. (*Rend. Acc. Lincei*, XVII, 1908, pp. 344–345.)

BAONE.—**Prehistoric Settlement.**—Preliminary excavations on the

site of a prehistoric settlement at Baone (Venetia) are described by A. ALFONSI in *Not. Scav.* 1907, pp. 499-503 (3 figs.).

BRANURE (LOMBARDY).—A Bronze Helmet of striking character was found in the Po near Branure, and is described by G. PATRONI in *Not. Scav.* 1908, pp. 312-313 (cut). It has large cheek- and neck-pieces, and is very like a helmet found and preserved at Kiel. It is the first of this precise sort found in Italy.

BRESCIA.—New Inscriptions.—In laying the foundations of a public building several inscriptions were brought to light, one of which mentions a veteran of the *Legio IV Flavia Felia*. In various parts of the suburbs sepulchral inscriptions have been found. One of these is in honor of a *sevir Augustalis*, and a mutilated stele preserves the head of a man, doubtless a portrait of the deceased. (*Rend. Acc. Lincei*, XVII, 1908, pp. 89 and 90.)

G. PATRONI reports upon various tombs, with their contents, and sundry sepulchral inscriptions found within the last few years at Brescia in *Not. Scav.* 1907, pp. 717-727 (3 figs.).

CAGLIARI.—Portrait-head.—A marble head of a man of much personality of feature has been discovered at the bottom of a well in Cagliari, and is now in its museum. (A. TARAMELLI, *Not. Scav.* 1908, p. 144; 2 figs.)

CASTIGLIONE D' ORIVA (ETRURIA).—Deposits of the Bronze Age.—L. A. MILANI describes in *Not. Scav.* 1907, pp. 665-675 (10 figs.), two deposits of the bronze age found in the district of Castiglione D' Oriva, rich in "axes" and rude disks of bronze, and takes occasion to discuss the monetary function of *aes rude* in Etruscan tombs. The article has been reprinted in *R. Ital. Num.* XXI, 1908, pp. 443 ff.

CAVA DEI TIRRENI.—A Hoard of Coins.—Of a hoard found at Cava dei Tirreni, but in considerable measure stolen and dispersed, G. DE PETRA examined ninety coins of Greek, or Graeco-Roman, towns, and forty-seven pieces of *aes grave*, of which latter group he gives a detailed description in *Not. Scav.* 1908, pp. 84 f.

CIVITA CASTELLANA.—Faliscan Tombs.—Three tombs of the Faliscan necropolis have been explored, yielding besides vases of the usual type, female ornaments: fibulae, beads of blue glass and disks of amber belonging to a necklace, etc. (*Rend. Acc. Lincei*, XVII, 1908, pp. 90 and 212.)

CIVITA LAVINIA.—Finds in a Cistern.—The cleaning of an ancient cistern in Civita Lavinia, see *A.J.A.* XII, p. 367, led to the recovery of a considerable number of coins, ranging from the time of the late republic to that of the elder Philip, fragments of pottery and sculpture, and, worthy of especial note, an inscribed votive bronze vase, offered from the *aes multaticium* (cf. De Ruggiero, *Dizion. Epig.* I, p. 313), and fragments of a *labrum* of travertine with an archaic inscription around the edge in inlet bronze letters, recording the presentation by an aedile, L. Scantius (?). (D. VAGLIERI, *Not. Scav.* 1907, pp. 656-662; 6 figs.)

FERMO.—Funerary Objects discovered at Fermo in January, 1907, are described by G. PELLEGRINI, who thinks a *fibula* of unusual shape and a sword worthy of especial treatment. (*Not. Scav.* 1908, pp. 252-261; 7 figs.)

LOVERE.—Roman and Pre-Roman Tombs.—Two tombs of the Roman period opened at Lovere, one of c. 170-175 A.D., the other as late as

Constans, as shown by the coins found in them, yielded many striking objects, chief among them a silver bowl embossed with figures of fish and fishing implements. Other discoveries pointed to a pre-Roman (Gallic) culture on the site, dating from near the beginning of the La Tène period. (G. PATRONI, *Not. Scav.* 1908, pp. 1-16; 7 figs.)

MALABARBA. — A Roman Sarcophagus. — A fine Roman sarcophagus has recently been found at the Vicolo di Malabarba outside the Porta S. Lorenzo, Rome. The front and one side are covered with scenes in relief representing a victory of Romans over barbarians, probably Parthians or Dacians. Among the scenes are a Roman soldier forcing a captive to bow down before a youthful Roman who is perhaps an emperor or a general; a barbarian in chains accompanied by his wife and child; a bearded barbarian led by a Roman soldier; and a fine figure of Pegasus which was perhaps the ensign of the legion. Inside the sarcophagus were a skeleton, a glass vase, and a denarius of the time of Titus. (*Nation*, October 15, 1908, p. 369.)

NUMANA (PICENUM). — **Objects from Tombs** in the ancient necropolis of Numana, among them fragments of a bronze helmet and of *situlae*, as well as pottery, are described by G. PELLEGRINI in *Not. Scav.* 1907, pp. 165-170 (5 figs.).

OSTIA. — Ancient Remains. — In planting trees along the road from the modern village of Ostia to the sea, there were found walls of various periods, a mosaic pavement, and polygonal blocks belonging to a road running parallel to the present one. A number of tombs were brought to light, in one of which was a terra-cotta plaque ornamented with scenes relating to the cult of Dionysus; also an inscription of the classical period dedicated by a father to his daughter, which had been used in Christian times for another lady. (*Rend. Acc. Lincei*, XVII, 1908, p. 347.)

Ancient Road. — Near the Temple of Vulcan a road has been discovered, leading towards the Mills. In the course of the excavations an enormous number of fragments of vases and tiles were brought to light, including stamped bricks and lamps. (*Rend. Acc. Lincei*, XVII, 1908, p. 450.)

Archaic Inscription. — In the exploration of a columbarium there was found in a tomb a marble slab with a mutilated retrograde inscription. (*Rend. Acc. Lincei*, XVII, 1908, p. 393.)

The Porto Trajano. — The investigations of Jérôme Carcopino, former member of the École de France, show that the measurements of the entrance made by Canina and Texico are too large. The remains of the left mole are more scanty than has been assumed, consisting only of the foundations, which are considerably below the sea level. (*Not. Scav.* 1907, pp. 734-740, 2 plans; also *Rend. Acc. Lincei*, XVII, 1908, pp. 90-91.)

Coins from Recent Excavations. — Various coins found in recent excavations at Ostia are described by D. VAGLIERI in *Not. Scav.* 1908, pp. 331, 335 f.

Wall Paintings. — A room has been discovered in the Via della Fontana with wall paintings in the incrustation style, recalling those in the villa at Boscoreale and in the Farnese Gardens, but of less fine workmanship than the latter. This discovery extends the use of that style beyond the limits observed at Pompeii. The painting had been covered with a layer of stucco, which helped to preserve it. On the floor was a mosaic pavement of

great beauty, with geometric designs. The room was lighted by a window closed by a large plate of mica, of which many fragments were found, but not enough to admit of a reconstruction. There were found in the room fragments of sculpture and of what was apparently a *tabula lusoria*, amphorae with painted inscriptions, bits of glass vases with raised letters, and fragments of furniture and of domestic utensils. Several of the amphorae were stopped with plaster, on which a circular seal had been impressed with a reading which had become illegible. (*Rend. Acc. Lincei*, XVII, 1908, 213-214. See also D. VAGLIERI in *Not. Scav.* 1908, pp. 21-26; 2 figs.)

OSTUNI (LECCE).—**A Hoard of Roman Coins.**—A hoard composed of 141 *denarii* and one *victoriata*, buried apparently at the beginning of the Social War, is described by FRANZ PELLATI in *R. Ital. Num.* XXI, 1908, pp. 441 f.

PALESTRINA.—**An Ancient Street.**—A portion of an ancient street, paved with black and white polygonal blocks, has been found under the modern street leading from the Porta del Sole to the quarter known as "Il Generale." (*Rend. Acc. Lincei*, XVII, 1908, p. 450.)

Ancient Roman Weights.—The clearing of a cistern at Palestrina resulted in the finding, among numerous architectural and other fragments, of seven marked ellipsoidal weights of basalt (*decussis*, three *sextarii* or *semicon-gius*, *tressis*, *dupondius*, *quadrans*, *sextans*, and *uncia*), corresponding to a weight of the Roman pound varying from 322+ grammes to 329+ grammes. (D. VAGLIERI, *Not. Scav.* 1907, pp. 683-696; 24 figs.)

Excavations.—Various fragments have been found in the continuation of the excavations. Noticeable are a capital like that of the façade of the so-called Temple of Fortune, and various mirrors, and a cista, of which the designs are published by D. VAGLIERI in *Not. Scav.* 1907, pp. 473-483 (25 figs.).

PIANO DELLA CAPELLA.—**The Site of Nuceriola.**—A. Meomartini has identified as the site of the ancient Nuceriola, the first station of the Appian Way beyond Beneventum, the district known as Piano della Capella. (*Rend. Acc. Lincei*, XVII, 1908, p. 347.)

POGGIO DELLA MOSCONA.—**An Ancient Town.**—Excavations at Poggio della Moscona, south of the remains of the ancient city of Rusellae, revealed a settlement of primitive times, over which a mediaeval fortress had been constructed. A short distance away remains of buildings of the Roman period were found. (*Rend. Acc. Lincei*, XVII 1908, pp. 391-392.)

POMPEII.—**Casa dei Amorini Dorati.**—The Casa dei Amorini Dorati is fully described and pictured by A. SOGLIANO in *Not. Scav.* 1907, pp. 549-593 (41 figs.); 1908, pp. 26-43 (8 figs.); also *Rend. Acc. Lincei*, XVII, 1908, pp. 214-216. It is striking for the large number of sculptures discovered in it, including two portrait-busts, for its wall-paintings, and for a *lararium* with its furnishing all in place (statuettes of Jupiter, Juno, and Minerva enthroned, a seated Mercury, two *Lares* of the common type, an oenochoe, and a case for *styli*). The house has been "restored" into somewhat of its original condition, and forms one of the most interesting places in the city. A bust of a young girl presents in the half-tone plate a striking similarity to some works of the Italian Renaissance. The three central paintings in the house represent Jason and Pelias, Thetis in the workshop of Vulcan

inspecting the arms of Achilles, and Achilles in his tent with Patroclus and Briseis, the last one being in a fragmentary condition. Of the disks of glass covered with gold leaf on which figures of Cupids are incised, there are two specimens, only one of which is complete. It represents a nude figure, with two long veils descending from the shoulders about the arms and body, and bearing on its shoulders a little fawn in the attitude of the Mercury Criophorus, or the good shepherd in Christian art.

Excavations in Reg. VI, Insula XVI.—Plans and cuts, as well as a minute description, of the excavations in the locality of *Reg. VI, Insula XVI*, are continued by A. SOGLIANO in *Not. Scav.* 1908, pp. 53-84 (9 figs.). Among the wall-paintings is a new scene from a Hercules-myth. The account is continued on pp. 180-192 (3 figs.); and on pp. 271-298 (23 figs.). A considerable number of interesting bronze vessels are pictured and described. One small house is of interest in the study of the development of the early Italic house.

Paintings.—In a street in the northern part of *Reg. V, Ins. I*, there were found a little way below the level of the pavement two oval disks of rock crystal (greater diam., .042; lesser diam., .037; thickness, about .003), with paintings representing the most advanced type of art as yet discovered at Pompeii. One of these presents a three-quarters view of a beautiful male head, with the neck bare, and with the edge of a blue robe on the right shoulder. The colors are remarkably well preserved. There was formerly a background of ivory. The painting on the other disk is almost wholly destroyed, but it represented a head, probably that of a woman. (*Rend. Acc. Lincei*, XVII, 1908, p. 216-217.)

POZZUOLI.—**A Grave Inscription.**—In *Röm. Mitt.* XXIII, 1908, pp. 71-77, C. HUELSEN discusses and interprets the epitaph of a certain T. Caesius Anthianus, a local celebrity of the third century A.D., found at Pozzuoli. It is noteworthy that the praenomen Titus occurs in this family for three generations in succession. The cohort which Caesius first commanded was stationed in Britain during the second and third centuries.

RAVENNA.—**New Inscriptions.**—A number of new inscriptions relating to the praetorian fleet at Ravenna have been found. (*Rend. Acc. Lincei*, XVII, 1908, p. 391.)

REGGIO CALABRIA.—**Excavations in the Necropolis.**—Excavations in the necropolis at Reggio yielded a considerable amount of interesting toilet and other articles, described by V. SPINAZZOLA in *Not. Scav.* 1907, pp. 704-715 (12 figs.). One of the tombs was roofed with false vaulting like the Tullianum at Rome.

ROME.—**Excavations in the Circus Maximus.**—In *Mél. Arch. Hist.* XXVIII, 1908, pp. 229-231, P. BIGOT reports the results of four excavations on the site of the circus Maximus, which are useful in helping to determine the course of the walls and the dimensions of the structure. He gives the total length as 600 m., and the width, exclusive of the great additions made on the slopes of the Aventine and Palatine during the empire, as 141 m.

The Excavations at Monte Citorio.—The excavations at Monte Citorio have shown that the hill was not formed by the ruins of a republican building, but that it belongs to the latter part of the imperial period. The excavations have brought to light some beautiful architectural fragments in marble, which evidently formed part of a handsome structure, in

all probability the *ustruna* of Marcus Aurelius (Not. Scav. 1907, pp. 525-529), as well as a marble head of fine workmanship, probably a head of Mercury. (*Rend. Acc. Lincei*, XVII, 1908, pp. 92 and 213.)

Excavations in Trajan's Forum.—In Not. Scav. 1907, pp. 361-427 (50 figs.), G. BONI gives a full technical report of the results of the work in 1906 in and about the Forum of Trajan and the Column.

Excavations in the Via Farnagosta.—Further excavations north of the Vatican, in the Via Farnagosta, among the tombs of the Socconian family, along the line of the Via Triumphalis, have brought to light a large cippus, of a size comparable to a sarcophagus. It has a *puleius*, ornate pilasters, garlands, etc., and two reliefs, of which one represents a married couple reclining at table, the other (less well preserved) is to be connected probably with the nuptial ceremonies. A portrait bust of another member of the same family and further inscriptions have been found; also a sarcophagus and various fragments. (G. GATTI, *B. Com. Rom.* XXXV, 1907, pp. 331-335; 2 figs.)

Openings in the Walls.—It is announced that Signor Nathan, the Syndic of Rome, is eager to aid the archaeologists in avoiding unnecessary destruction of the city walls (see *A. J. A.* XII, p. 107). One of the questions now being considered is where the openings can best be made in the long stretch of wall between the Porta Sebastiano and the Porta San Giovanni. Signor Boni suggests the reopening of three old gates now closed, the Porta Latina, the Porta Metronia, and the Porta Asinaria; and that the Via Latina be made into a wide boulevard. This would make possible the excavation of the tombs which once stood on both sides of it. A more difficult problem is presented by the pieces of old wall between the Porta San Lorenzo and the Porta Maggiore, and between the latter and the Porta San Giovanni. In the first of these cases the railway requires a wide opening, which if made at the acute angle now proposed would destroy a considerable stretch of wall. This could be avoided if the railway is curved. In regard to the space between the Porta Maggiore and the Porta San Giovanni, where the old walls carry the Claudian aqueduct, Signor Boni suggests that the openings be made through the arches of the aqueduct which in some places would furnish a wide enough passage without further alterations. (*Nation*, August 6, 1908, p. 125.)

The New Fragment of the Servian Wall.—The new fragment of the "Servian" Wall found in excavations for the Ministry of Agriculture, Industry, and Commerce (*A. J. A.* XII, p. 368) is nearly parallel to the Via Venti Settembre. Part of it is of large blocks of yellow tufa, and part of smaller blocks of ash-tufa. In the same vicinity, and south of the wall, early sepulchral remains show the extent in this direction of the primitive Quirinal necropolis. (G. GATTI, *B. Com. Rom.* XXXV, 1907, pp. 336-337.)

An Amazon from the Gardens of Sallust.—PAUL GAUCKLER publishes in *C. R. Acad. Insc.* 1908, pp. 274-286 (4 figs.), the statue of an Amazon in repose found in the spring of 1908 on the site of the gardens of Sallust. It is of Pentelic marble and is at present 1.04 m. high. The head and left arm as well as the right foot and part of the base are missing, and there are several minor breaks, but on the whole the statue is well preserved and the surface still retains its ancient polish. Except for the right breast, the figure is fully draped and stands quietly beside a tree-trunk. The right

arm hangs by the side and the hand holds the tip of a bow. The left arm was raised and probably touched the head. Gauckler believes that the prototype of this Amazon was of bronze and dated from the middle of the fifth century B.C., but that the figure itself was probably carved in the time of Sallust.

Relief of a Barbarian.—In the construction work for the new hall of the Chamber of Deputies a fragment of a relief was found presenting a finely rendered upper part of the figure of a barbarian with shields visible in the rear. (*Not. Scav.* 1908, p. 46; fig.)

Portrait-bust and Inscriptions.—Among the objects exhumed in the course of excavation on the Via Portuense for the railway-station are a portrait-bust of a beardless, middle-aged man, and some sepulchral inscriptions, most interesting among them one of M. Valerius Messalla Potitus (? cos. suff. 32 B.C.), which mentions him as twice proconsul of Asia, the repetition of the office in his case being previously unknown. Another inscription commemorates a *decurio lecticariorum*. (D. VAGLIERI in *Not. Scav.* 1908, pp. 174-178; fig.)

Altars to the Lares.—In works on the Via Portuense three adjacent altars were found inscribed, the first to the Lares Semitales, the third to the Lares Viales. The second word of the inscription on the middle altar is mutilated. D. VAGLIERI thinks Lares Rurales impossible, and suggests Lares Curiales, though doubtfully. He compares the *vicus Larum ruralium* (?) on the Capitoline Base, *C.I.L.* VI. 975. (*Not. Scav.* 1907, pp. 465-466; fig.)

Inscriptions.—A number of inscriptions have been found in various parts of the city among which are the following: in the Villa Patrizi, where a section of the Via Nomentana has been brought to light, lead pipes with the names of the consuls for 164 A.D.; on the estate called Prati Fiscali at the Porta Nomentana a dedication to Bona Dea; at Monte Parioli a number of fragments one of which preserves the consular date of the year 397 A.D. (*Rend. Acc. Lincei*, XVII, 1908, pp. 213, 345-346 and 449-500.)

Mention of a New City in Spain.—Excavations for a new garage on the Via Flaminia disclosed a number of sepulchral inscriptions, one of them of a Baetic citizen accredited to a *civitas Baesarenensis* (previously unknown). Another commemorates a man whose name, VENETIANI, standing at the end of the inscription, may be a *signum*, or denote him as a member of the *factio veneta*. (D. VAGLIERI, *Not. Scav.* 1907, p. 460 ff.)

Temple of the Sun?—Certain architectural fragments found behind the apse of S. Silvestro in Capite, of a style that might belong to the age of Aurelian, appear to D. VAGLIERI to corroborate the opinion of Urlichs and Huelsen that there stood the Temple of the Sun. (*Not. Scav.* 1908, pp. 231-233.)

A New Entrance to the Forum.—A new entrance to the Forum has been planned at the end of the Via Cavour where the temporary office of the excavations used to stand. It is hoped that the old gateway of the Farnese gardens on the Palatine, now in fragments, may be made to serve as the entrance. (*Nation*, August 6, 1908, p. 125.)

Discovery of Seals in the Forum.—In a small drain beneath the pavement of the Forum there have been found eighty-six seals with various artistic devices such as the wolf and twins, Mars and Venus, Cupid, Mer-

cury, Iris, Fortuna, Silenus with a boar's head, and many figures of animals. Many lamps were also found, one of which is ornamented with the figure of an Eastern god inscribed *mystikon*. (*Nation*, August 6, 1908.)

Gold Ornaments.—In clearing out a sewer near S. Susanna there were found two bracelets of massive gold and two objects in gold wire, formed into the shape of human ears, which were probably intended for earrings. (*Rend. Acc. Lincei*, XVII, 1908, p. 345.)

Base of a Candelabrum.—In the grounds of the former Villa Patrizi on the Via Nomentana a remarkable fragment, of fine workmanship, was discovered, which had been damaged by fire. It is ornamented with figures of Nereids, Sirens, and Sphinxes, and was apparently the base of a candelabrum. (*Rend. Acc. Lincei*, XVII, 1908, p. 346.)

Gaming Board.—At Mandrione, on the Via Casilina, together with a few sepulchral inscriptions (one Greek, metrical), was found a marble gaming board, of which a diagram is given by D. VAGLIERI in *Not. Scav.* 1908, p. 264. It is surely to be compared with those boards having inscriptions in two columns, each of three words of six letters, the letters marking the positions. Here the positions are marked merely by incised circles, or (at the edge of the board) semicircles.

Remains of Hydraulic Structure.—On the Via Venti Settembre excavations for the new Garage des Thermes disclosed a stucco-lined channel of about 10 m. in length, constructed with heavy walls of stone, and running northwest and southeast. (D. VAGLIERI, *Not. Scav.* 1907, p. 438.)

Coins found at Rome in 1907.—In *R. Ital. Num.* XXI, 1908, pp. 127-132 (pl.), FR. GNECCHI pictures and describes twelve coins from Rome (11 new),—three of them medallions (one of Aelius, two of Antoninus Pius), three imperial bronzes (Galba, Maximin, and Gallienus), one bronze of great size and weight (Caligula, 125 g.), one piece either an imperial bronze or the proof of a gold medallion (Gallienus), and a new bronze *tessera* of Augustus.

Find of Denarii.—At Rome, on the Via Nomentana, was found a hoard of 40 *denarii*, ranging in date from Nerva to Heliogabalus, and two bronzes of the first century, and one of Julian II. (*Not. Scav.* 1908, p. 267.)

Sextans with Bilingual Inscription.—GIOV. PANSA publishes a unique coin (*sextans*) from the mint of Tarquinia, with an Etruscan inscription on one side ([*T*]archna), and a Latin inscription ([*Ro*]mano[m]) on the other, and discusses the general matter of Etrusco-Roman coinage in *R. Ital. Num.* XXI, 1908, pp. 377-386 (fig.).

RUVO.—**Messapian Inscription.**—A punctate Messapian inscription on a bronze plate found in December, 1907, at Ruvo (Apulia) is described by A. JATTA and interpreted by L. CECI in *Not. Scav.* 1908, pp. 86-89 (2 figs.).

S. CERBONE.—**Discoveries in the Necropolis of Populonia.**—Excavations at S. Cerbone near Porto Baratti, within the area of the ancient necropolis of Populonia, have yielded interesting finds. One tomb was that of a girl, whose head was crowned with a diadem of golden olive leaves, ornamented in the centre with a rosette and at the ends with heads of Ammon. In another were found three pieces of *aes rude*, which had been placed in the mouth of the corpse as Charon's fee. Another yielded a statuette of bronze in the Aeginetan style, representing the suicide of Ajax. There were also found objects belonging to the period from the ninth to the

seventh centuries B.C., valuable for the study of costume, and the foundations of an ancient temple, which Professor Milani believes was destroyed during the expedition of Dionysius of Sicily in 384 B.C. (*Rend. Acc. Lincei*, XVII, 1908, pp. 446-448.)

SARDINIA. — S. ANTIOCO. — Punic and Roman Remains. — Remains of widely different ages and character found at S. Antioco are discussed and pictured by A. TARAMELLI in *Not. Scav.* 1908, pp. 145-162 (15 figs.). The statue of a young Roman commander was found in pieces, easily put together. The person represented appears to be Drusus Nero. (*Not. Scav.* 1908, pp. 192-197; 2 figs.)

CAGLIARI. — A Portrait Statue. — At Cagliari, in Sardinia, at the bottom of a well, a marble head of more than life-size was discovered, executed in the style of the first century of the Empire, and evidently a portrait. It probably represents some local magistrate or benefactor of the town. Explorations in the Punic necropolis of the ancient city of Sulci yielded valuable material. (*Rend. Acc. Lincei*, XVII, 1908, pp. 348-349.)

SICILY. — Archaeological Explorations. — P. ORSI prints in *Not. Scav.* 1907, pp. 484-498 (fig.), a preliminary account of his explorations at various sites in the southeastern part of Sicily within the years 1905-07. The account is continued on pp. 741-778 (29 figs.), where discoveries in Syracuse are described. Prominent among these are a red-figured crater, 51 cm. high, the largest of the painted vases yet known from Syracuse. One side shows a battle between two horsemen and two footmen, the other two young men and a maiden conversing. A number of examples were found of *vaða* put in the mouth of the dead, in the shape of thin disks of gold. At Gela, *aes rude* was thus used; at Centuripe, coins were found in the hand. — New explorations were conducted in the Catacombs of S. Giovanni (plans), from which many inscriptions are given, one of especial interest and difficulty, referring to a bishop.

TERNI. — Excavations in the Necropolis. — Excavations in the necropolis at Terni, near the steel works, are described at length by A. PASQUI and L. LANZI in *Not. Scav.* 1907, pp. 595-650 (41 figs.). LANZI adds a brief account of other discoveries at the edge of the city. The excavations were carried out in 1887 and 1904.

TORRE DEL PADIGLIONE. — A New Antinous. — In *C. R. Acad. Insc.* 1908, pp. 338-357 (pl.; plan), PAUL GAUCKLER publishes a fine relief representing Antinous. It was found in the ruins of a villa a short distance north of Torre del Padiglione and about 50 km. south of Rome, in October, 1907. The slab, which is 1.42 m. high, 0.68 m. wide at the top, and 0.63 m. wide at the bottom, is almost perfectly preserved. Antinous is represented as a rustic deity standing before a small altar and holding a pruning knife in his right hand. Above is a vine. A dog is following him. He wears only a linen tunic girt up at the waist, with his right shoulder bare. On the altar is the signature *Ἀντωνίανος Ἀφροδισιάς ἐποίησεν*. Antonianus is not otherwise known, but he must have been one of the group of artists who flourished at Aphrodisias at the beginning of the second century A.D. The relief dates from between 130 and 138 and is of very careful workmanship. (Cf. also G. E. Rizzo, *Not. Scav.* 1908, pp. 48-52.)

TURIN. — The Excavation of the Roman Theatre. — The excavation of the Roman theatre discovered in 1899 under the Palazzo Reale at Turin

has been completed. The ruins extend to the Via Venti Settembre along which a broad arcade ran. The entire ground plan with the entrances and steps can be followed. (*Nation*, November 5, 1908, p. 448.)

VAIANO (CASTIGLIONE DEL LAGO).—*An Etruscan Tomb.*—At Vaiano was discovered in January, 1908, a vaulted tomb, with travertine door, to which access was given by a long *dromos*. Within were two inscribed cippus-urns containing ashes from incineration, and two large amphorae. (E. GALLI, *Not. Scav.* 1908, pp. 317-323; 5 figs.)

FRANCE

ALESIA.—*The Present State of the Excavations.*—An account of the present state of the excavations at Alesia (see *A.J.A.* XII, pp. 110 and 370) is given by S. D. in the *Nation*, October 1, 1908, p. 322. The remains show three different periods from the time of the city's prosperity in the first century A.D. to its decadence in the fourth century. The theatre, with a façade 270 feet long, has been uncovered and back of it the substructure of a temple. To the east are three apses of different periods not yet fully understood, and to the north a number of other buildings. There is "a vast quadrangle, with a façade having a double row of columns at different levels, and a building of many halls with a large full-centred arch for its portal. At the place of the forum there still exist the bases of the columns which made up the colonnades of its northern and southern sides. On the sites of the private houses many separate rooms are found, apparently cellars." A great number of antiquities was brought to light, some having artistic merit, as a bust of Silenus, and a reclining Gaul, both statuettes. A wooden Pan's pipe found at the bottom of a well is the first instrument of its kind to come down to modern times. The excavations throw much light upon the industrial activity of Gaul as early as the first century A.D., particularly in the field of pottery.

A Dedication to Ucuëti and Bergusia.—In *C. R. Acad. Insc.* 1908, pp. 498-500, A. HÉRON DE VILLEFOSSE announces the discovery at Alise-Sainte-Reine (Alesia) of a bronze vase 0.46 m. high, bearing the inscription *Deo Ucuëti et Bergusiae Remus Primi fil(ius) donavit; v(otum) s(olvit) l(ibens) m(erito)*. The inscription is important for the names of the divinities who undoubtedly had a temple at Alise.

LIEVIN.—*Excavation of a Gallo-Roman Cemetery.*—In *B. Soc. Ant. Fr.* 1908, p. 137, A. DE LOISNE gives a brief notice of the excavations of E. Drouet in the Gallo-Roman and Frankish cemetery at Liévin (Pas-de-Calais). Seven hundred and fifty-two graves which yielded about 2500 objects were opened.

MESNIL-GERMAIN.—*A Prehistoric Iron Foundry.*—In *B. Soc. Ant. Fr.* 1908, pp. 138-139, F. DE MÉLY gives a brief account of the finding of a prehistoric iron foundry 1.50 m. below the surface at Mesnil-Germain, canton of Livarot. About 200 kg. of iron in broken pigs was taken out and as much more remains. Iron is not found nearer than the forest of Ouche, 50 km. distant, but it was probably brought to this place for smelting because there is a bank here full of fossil bones which furnished abundant phosphate for the reduction of the mineral.

MURET.—*Excavations at the so-called "Camp of Caesar."*—O. VAUVILLE, in *M. Soc. Ant. Fr.* LXVII, 1907, pp. 216-230 (2 figs.), gives

an account of his excavations on the site of the so-called "Camp of Caesar" at Muret, 13 km. southeast of Soissons. The place is just south of the town which it overlooks. The principal part of the fortification runs from north to south and has a length of 269 m. There was a ditch from 24 m. to 27 m. wide, mostly cut out of the solid rock, and back of it a rampart. The whole had a thickness of from 55 m. to 65 m. To the south is another piece of the fortification 169 m. long. The principal gate near the southwest corner was admirably arranged. It was protected by two ditches, and by two ramparts 15 m. long facing each other on each side of the entrance. The breadth and shape of the ditch, which is concave, prove that this was not a Roman, but a Gallic, fort. It must have belonged to the Suessiones; but the woods which cover the site have prevented the finding of objects which might furnish a date.

NARBONNE. — A Grave Stele. — In *C. R. Acad. Insc.* 1908, pp. 496-498 (fig.), A. HÉRON DE VILLEFOSSE gives a brief account of a finely preserved grave stele recently found at Narbonne. Above at the left is a mill which a mule with eyes blindfolded is turning. To the right is a dog having a collar with bell attached around his neck. Above the dog is a small altar. Below is a Latin epitaph.

PARIS. — In the *Marché des fleurs*, among other Roman remains, has been found the epitaph of a soldier Fortunatus. This is said to be but the fifth such monument discovered at Paris. (L. CANTARELLI in *B. Com. Rom.* XXXV, 1907, pp. 368-369.)

SAINTE-COLOMBE-LEZ-VIENNE. — The Genius of the Colony of Lyons. — A. HÉRON DE VILLEFOSSE, in *B. Soc. Ant. Fr.* pp. 134-136, gives a brief account of a terra-cotta medallion 5.5 cm. in diameter from a vase. It represents the Genius of Lyons standing alone and pouring a libation over an altar at the right. He has a light chlamys over his left shoulder and rests his left hand on a sceptre. There is a crow at his left. Seven other medallions with this subject have been found, most of them at Sainte-Colombe-lez-Vienne, from which this came.

VILLENEUVE-SAINT-GERMAIN. — A Settlement of the Suessiones. — In *M. Soc. Ant. Fr.* LXVII, 1907, pp. 1-15 (2 figs.), O. VAUVILLE shows that the peninsula lying immediately to the north of Villeneuve-Saint-Germain, and bordered on three sides by the Aisne, was an ancient settlement of the Suessiones. A fortification extending from river to river protected it on the south. Remains of Gallic pottery were found in six different parts of the site.

GERMANY

BERLIN. — An Amulet against the Demon Labartu. — In *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXX, 1908, cols. 74-78 (2 figs.), F. DELITSCH publishes an amulet against the female demon Labartu recently acquired by the Berlin Museum. It is of black stone, 7 cm. high and 5.58 cm. wide, and has on one side an inscription in late Assyrian cuneiform characters, and on the other a relief representing Labartu with a lion's head, kneeling on the back of a horse and holding a double-headed serpent in either hand.

A Babylonian Seal with the Etana Myth. — In *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXIX, 1908, cols. 232-235 (fig.), L. MESSER-

SCHMIDT publishes a Babylonian seal cylinder in the Berlin Museum which has upon it a representation of the Etana myth. There are four groups on the cylinder. At the left is Etana seated upon the eagle, and near by in the field the sun and moon. Below the hero are a number of dogs. Next comes a herdsman driving his flocks of sheep and goats towards a pen. Above, that is, in the background, is a potter at work. Near by is another man who is perhaps a baker. A number of circular objects in front of him are supposed to be cakes. These are the scenes Etana looked down upon in his passage through the air. The cylinder dates from the first half of the third millennium.

An Illustration of the Great Altar at Pergamon.—In *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXIX, 1908, cols. 238-241 (fig.), H. DRESSEL publishes a large bronze medallion in the Berlin Museum. It has on the obverse the portraits of Septimius Severus and his wife Julia, and on the reverse the great altar of Pergamon. In the centre are the steps on either side of which stands an ox on a pedestal. These were probably of bronze. Above are seen the columns of the colonnade with their entablature, and higher still are four statues. At the top of the steps is seen the actual altar, above which appears an arch-shaped canopy supported by two columns. Only two other complete copies of this medallion are known, one of which is in London and the other in Paris.

Two New Bronzes.—In *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXIX, 1908, cols. 291-295 (2 figs.), R. ZAHN publishes two small bronzes in the Antiquarium, Berlin. One is Etruscan, 20.5 cm. high. It represents a rude youth standing with his left hand resting on his hip while his right holds a strigil against his thigh. Above the head is a ring and below the base are five hooks. The exact use of this object has not been determined. The second bronze is a small figure of Odysseus 6 cm. high. He is closely wrapped in his garments, has the *pilos* on his head, and is seated on an altar. Several similar representations of the hero are known, and the writer argues that they go back to an original of the school of Scopas.



FIGURE 7. — SILVER RELIEFS FROM MILETOPOLIS.

Two Silver Reliefs.—In *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXX, 1908, cols. 65-67 (2 figs.), H. WINNEFELD publishes two cir-

cular silver reliefs of Hellenistic date from Miletopolis in northwestern Asia Minor (Fig. 7). They are about 8.4 cm. in diameter and represent, in high relief, one a portrait head of Demosthenes in profile, and the other a Silenus crowned with grape leaves seen in full front. The Demosthenes may be traced back to the statue of Polyeuctus set up in Athens in 280 B.C. and is one of the oldest, if not the oldest, copy of that work in existence. Gold leaf was used to decorate the leaves, the iris of the eyes, and the lips of the Silenus.

CANNSTATT.—**Excavations at the Roman Camp.**—The recent excavations conducted by Drs. Goessler and Sontheimer on the site of the Roman camp at Cannstatt are reported upon at length in *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 60–64. The praetorium was completely uncovered and parts of several other buildings laid bare. The minor finds in terra-cotta and in bronze were very numerous. Traces of a pre-Roman settlement were found, and the Roman occupation dated as far back as the first century A.D.

DUNAPENTELE.—**The Clay Model of a Fortification Gate.**—In *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 41–46 (4 figs.), R. ENGELMANN publishes the clay model of a fortification gate found by Mahler in 1907 at Dunapentele, the ancient Intercisa, on the Danube. The gate with its three openings is flanked by towers in one of which are three windows one above the other. Over the gate and just under the projecting roof are four more windows side by side. Below these is the inscription *Ilarus fecit porta(m) fel(icitatē)*. He thinks that this was probably the architect's original model for one of the town gates. It was much broken when found, but practically all the pieces of it were recovered. F. DREXEL discusses this monument at some length (*ibid.* pp. 57–59; fig.) and shows that two of the fragments belong to a second model. This was a grave monument in the form of a square building with vaulted passageways running through it in each direction. Above was a second story with two windows on each side and higher still a pyramidal roof ending in a pinnacle. He argues that these were not real models, but were made by some potter for his own amusement; that the gateway is represented as seen from within.

HOVEN.—**Roman Graves.**—Six Roman graves have been opened at Hoven near Düren. Numerous vases found in them show that they date from the third century A.D. (SCHOOFF, *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 59–60.)

KÖNIGSBERG.—**Vases with a Meander Decoration.**—In *Z. Ethn.* XL, 1908, pp. 772–775 (6 figs.), W. HINDENBURG publishes two vases adorned with a meander of the East Germanic pattern found near Königsberg. They date from the first century A.D.

LENGOWO.—**Hoard of Denarii in Free Germany.**—In *Z. Num.* XXVI, 1907, pp. 304–316, K. REGLING describes in detail a hoard of 215 Roman denarii, ranging in date from Nero to Marcus Aurelius, found in the spring of 1906 in Lengowo (province of Posen). The hoard is striking for the fact that it was concealed (or lost in the moorland) in free Germany, as also for the fewness of the later coins in comparison with those of Trajan and Hadrian, which were 123 in number.

LESSENICH.—**Dedications to the Matronae Vacallinae.**—In *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 53–54, H. LEHNER

publishes the dedicatory inscriptions from three altars of the Matronae Vacallinae recently found near Lessenich. The largest altar is 73 cm. high and 37 cm. wide. Other dedications to these goddesses have been found in the vicinity, and it is probable that they had an important sanctuary in this neighborhood.

MAYEN IN DER EIFEL.—*The Neolithic Town.*—The neolithic town at Mayen in der Eifel (*A.J.A.* XII, p. 372) has been further examined and found to be smaller than was first reported. It is oval in shape, 360 m. long from north to south and 220 m. from east to west. The moat surrounding it was interrupted by several passageways. The complicated gateway, with numerous holes for posts and beams, has been laid bare. (*Römisch-Germanisches Korrespondenzblatt*, I, 1908, p. 47.)

SOLLER.—*Remains of a Roman Aqueduct.*—The remains of a Roman aqueduct have been found at Soller, near Düren. (*Schoor, Römisch-Germanisches Korrespondenzblatt*, I, 1908, p. 59.)

SOUTHWESTERN GERMANY.—*The Neolithic Settlements.*—A. SCHLIZ, in *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 69-75, describes three mounds, two belonging to the necropolis of the Heuchelberg and one on the other side of the Neckar, which are typical of a large number which were explored. They show modifications due to a change from the practice of burial to that of cremation. Besides sepulchral vases, a large amount of household pottery was found, showing affinity with widely separated peoples. The finds also show that the characteristic feature of the string-pattern pottery (see *A.J.A.* XI, p. 232) is not the decoration, but the form and the material. It is more widely distributed than was formerly supposed.

THOLEY IM HOCHWALD.—*Remains of a Roman Bath.*—There have been found, under the floor of the parish church at Tholey im Hochwald, the remains of a Roman building which seems to have been the bath attached to a villa. The size of the frigidarium shows that the villa must have been large and wealthy. (*Römisch-Germanisches Korrespondenzblatt*, I, 1908, p. 47.)

TREVES.—*The Excavations in the Amphitheatre.*—The excavations begun in the amphitheatre at Treves three years ago have been continued. The most important finds were a number of pieces of several ivory *pyzides*. Among the scenes carved on them are Daniel in the lion's den, the three youths in the fiery furnace, and a Pan playing the flute. (*Römisch-Germanisches Korrespondenzblatt*, I, 1908, p. 47.)

AUSTRIA-HUNGARY

ASSERIA.—*Recent Excavations.*—In *Jh. Oest. Arch.* I, XI, 1908, Beiblatt, cols. 17-88 (63 figs.), H. LIEBL and W. WILBERG describe their recent excavations at the ancient Asseria, which is on the road from Zara to Knin, four hours from Benkovac. The town was destroyed in the sixth century A.D. The walls of fortification are preserved for almost their entire extent, in places to a height of ten courses. There were three gates and a small door. The chief entrance, which was at the north, was an imposing gate dedicated to Trajan, as an inscription shows. About the forum a complex mass of buildings with colonnades in front of them was uncovered.

House walls were found in a number of places in the town. Nine fragmentary pieces of sculpture, none of them important, and thirty-one inscriptions were discovered, besides numerous minor objects.

CARNUNTUM.—*Recent Acquisitions of the Museum.*—The museum at Carnuntum has recently acquired forty inscriptions from the collection of Anton Widter, including the gravestone of the German king Aistomodius (*C.I.L.* III, 4453), besides various sculptures. Among the coins found during the year and now in the museum is a rare coin of the Emperor Regalianus. (*Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 10 and 11.)

A Terra Sigillata Plate.—In *Jh. Oest. Arch. I.* X, 1908, pp. 330-344 (pl.; 5 figs.), J. ZINGERLE publishes the fragments of a rectangular plate of terra sigillata from Carnuntum, the most interesting feature of which is a scene in three small panels on the rim representing the adventure of Odysseus with Circe. The hero is seated sword in hand at the left, while Circe, identified by her name in Greek letters, is kneeling before him. There is a large pot on the ground, and, above, the bar of the loom. A similar scene is found on a wall-painting from the Esquiline. The plate dates from the second century A.D. and was probably made in the vicinity of Trèves.

SALONA.—*Recent Excavations.*—Recent excavations at Salona have uncovered a basilica built in the time of Constans (333-350 A.D.), a bath, and a building of the time of Bishop Petrus (554-562). On each side of the Porta Caesarea an eight-sided tower was found. The old town lay to the west of the gate as far as the amphitheatre, while the new town was east of the gate (*Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 4 and 5).

SPALATO.—*A Marble Head.*—In *Jh. Oest. Arch. I.* XI, 1908, pp. 115-117 (2 figs.), A. HEKLER publishes a female head of marble 32 cm. high in the museum at Spalato. The nose and chin are badly broken; otherwise it is well preserved. The face is turned slightly to the right, the lips are parted, and the eyes have an intense expression. The hair is carried in two wavy masses about the sides of the head, but is only roughly worked on top. The figure must have worn a diadem or perhaps a helmet. The head is in the style of Scopas.

STARIGRAD.—*The Roman Town Walls.*—Excavations at Starigrad, the Roman Argyruntum, have revealed the course of the town walls and brought to light several ancient streets and hundreds of Roman graves. (*Jh. Oest. Arch. I.* XI, 1908, Beiblatt, col. 7.)

VIENNA.—*Antiquities in the Wix Collection.*—In *Jh. Oest. Arch. I.* XI, 1908, pp. 142-164 (4 pls.; 22 figs.), H. SITTE describes the more important sculptures in the collection of Adolfo Wix at Vienna. All of them came from Thasos. They are: 1. An archaic Apollo head, 27 cm. high, well preserved except for a break on the nose. It probably dates from the first half of the sixth century B.C. and is a good example of Ionic sculpture of this date. 2. A headless draped female figure, 66 cm. high, of the end of the fifth century. The head was set in. 3. A seated Cybele, 42 cm. high, with head missing. 4. A half-veiled female head from a grave stele of the fourth century. 5. A beautiful female head of white marble, 32 cm. high, from a fourth-century grave stele. The head is veiled and slightly turned to the right. A similar head appears on a standing figure in the museum at Constantinople. 6. An Apollo head of the fourth century, 26.5 cm. high. 7. A headless standing female figure, 1.06 m. high, fully draped, with right

hand resting on a pillar and left hand on her hip, of Hellenistic date. 8. Two bearded heads of Heracles of the third century. 9. The head and body of a Dionysus in high relief, 64.5 cm. high, of Roman date. 10. A Hermes, 78 cm. high, of Roman date, broken off just below the knees. 11. A round grave relief with portrait of a young woman, of Roman date. 12. A carved pilaster capital of the fifth century A.D. *Ibid.* XI, 1908, Beiblatt, cols. 97-102 (6 figs.), the same writer describes the antiquities from Amphipolis in this collection. Among the terra-cottas are a woman seated, holding a patera in her right hand and wearing the *pilos*; eight so-called Attis figures, and a sleeping shepherd boy. There is a figure of Nike, 0.655 m. high, without head or arms, of Roman date, and two late reliefs of mounted huntsmen. There is a good bronze statuette of Zeus, 0.084 m. high, of unknown provenance. The god is nude and probably held the sceptre in his raised left hand. Part of the thunderbolt in his right hand and the feet are missing.

VIRUNUM.—**The Foundations of a Temple.**—The foundations of a temple have been found on the Helenenberge near Virunum. The work of excavation has not yet progressed sufficiently for its identification. (*Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 9 and 10.)

GREAT BRITAIN

HOARDS OF ROMAN COINS IN ENGLAND.—G. F. HILL describes two hoards of Roman coins found in England in *Num. Chron.* 1908, pp. 208-221: the first was unearthed in May, 1907, during the construction of the Brooklands Motor-Track, Weybridge. It was contained in an earthen pot, and consisted of bronze coins of the tetrarchy (297-305), of various mints. One hundred and thirty-seven are described in detail; others—perhaps many others—disappeared into the pockets of the workmen. The second collection is of 318 silver coins of the late fourth century, said to have formed part of a hoard dug up at Icklingham, in Surrey, many years ago. The mints vary, Trèves predominating. A full analysis is given, and the hoard must be compared with that found at Grovely Wood (cf. *Num. Chron.* 1906, pp. 329 ff.; *A.J.A.* XII, 118). "In connection with the numerous finds of coins in England dating from [this period], Professor Oman calls my attention to a passage in the A.-S. Chronicle under the year 418, stating that in this year the Romans gathered together all the treasure that they had in Britain, and some they buried so that no man might find it, and some they carried away with them to Gaul."

A GRAECO-ROMAN BRONZE LAMP.—A beautiful bronze hanging lamp, recently acquired in England and said to have been found in Switzerland, represents a boat with a figure of the infant Heracles reclining in the stern and strangling the two serpents. The association of this myth with a boat is probably occasioned only by the convenience of the boat form for a lamp. (F. H. MARSHALL, *J.H.S.* XXVIII, 1908, p. 273; 2 pls.)

CAERWENT.—**Recent Excavations.**—In *Archaeologia*, LX, 1907, pp. 451-464 (3 pls.; 5 figs.), T. ASHBY describes the excavations at Caerwent in 1906. A large house (No. VII N) was uncovered and is described in detail.

CROYDON.—**Hoard of Roman Bronzes.**—During the summer of 1905 some workmen, constructing a drain at the South End district of

Croydon, England, found an earthen pot containing nearly 300 Roman *sestertii*, *dupondii*, and *asses* dating from the reign of Claudius to that of Antoninus Pius. Of these 281 are described in detail by FREDK. A. WALTERS in *Num. Chron.*, 1908, pp. 353-372 (2 pls.). The author is inclined to think that at least the coins of Antoninus Pius of the Britannia type were struck in England, or especially for circulation there. The *dupondii*, as usual, excelled the *asses* in fabric. Analysis of two coins of the younger Faustina showed: for the *dupondius*, copper, 83.4 per cent, tin, 8.5, lead (chiefly), 8.1; for the *as*, copper, 99.65 per cent. These analyses practically correspond with those of Augustan coins. Other discoveries make it probable that a Roman station of some importance (Noviomagus?) lay near Croydon.

LONDON.—*New Sabaean Inscriptions in the British Museum.*—In *R. Séém.* XVI, 1908, pp. 293-301, J. HALÉVY publishes in Hebrew transliteration and translation three new Sabaean inscriptions in the British Museum.

NEWSTEAD.—*Roman Remains.*—In *Proc. Soc. Ant.* XXI, 1907, pp. 469-471, C. H. READ gives a brief account of the Roman remains found at Newstead since 1905. The most important objects are three helmets, two of which are of iron; part of a belt having two large silver bosses; and some pieces of metal which may be armor.

OXFORD.—*The Ashmolean Museum.*—The contents of a tomb found at Abydos, Egypt, including cylinders inscribed with the names of Senuert III and Amenemhat III (end of the twelfth dynasty) and remains of an imported Cretan vase of Middle Minoan III style are now in the Ashmolean Museum. These objects show that the Middle Minoan III period was contemporaneous with the twelfth Egyptian dynasty. The Museum has also received a series of terra-cotta votive statuettes from Petsofa, near Palaikastro, a bronze statuette of a warrior from Dodona, inscribed NIKIAZ MANΘEKEN (about 520 B.C.), and several vases. Three of these are described by J. D. BEAZLEY in *J.H.S.* XVIII, 1908, pp. 313-318 (3 pls.). A rather late black-figured pelike has on one side a representation of a shoemaker's shop, similar to one in Boston, but not so good, and on the other a scene connected with the popular stories of the birth of Pan, such as might have been made the subject of a satyr play about the time the worship of the god was introduced at Athens, in 490. An early red-figured crater a *colonnnette* is decorated with a single unframed figure on each side, a scheme that is not common in this style of vase. They are athletes, a discus-thrower feeling for his footholds, and a boxer with his strap, getting out of the other's way. A red-figured bell crater shows a hastily drawn but lively scene in a potter's workshop of the fifth century B.C.

PETERSFIELD.—*The Roman Villa.*—In *Cl. R.* XXII, 1908, pp. 161-162, A. M. WILLIAMS gives an account of the Roman villa one mile west of Petersfield. There were three wings around a courtyard, and a wall and gateway on the fourth side. The north wing consisted of living-rooms and a rectangular hall or yard subdivided by two rows of six stone bases for columns. The west wing was composed of an elaborate group of baths; the east wing of sheds or outhouses, but there is an octagonal chamber where it joins the north wing. On the evidence of coins the villa was occupied between 265 and 337 A.D.

RIBCHESTER.—Recent Excavations at the Roman Fort.—In *Cl. R.* XXII, 1908, pp. 196-197, R. S. CONWAY reports upon the excavations carried on at the Roman fort at Ribchester in the spring of 1908 by T. May, G. L. Cheesman, and others. The north wall with its gate and two towers was located, and, within the enclosure, two substantial buildings used as granaries. Remains of burnt wheat were found in both of them. A fragmentary inscription from the main building has the beginnings of five lines which are sufficient to date it between 198 and 211 A.D.

SILCHESTER.—The Excavations of 1906.—In *Archaeologia*, LX, 1907, pp. 431-450 (2 pls.; 8 figs.), W. H. ST. JOHN HOPE reports upon the excavations at Silchester in 1906. The work was confined to *Insula XXXIV*, in which a large house was uncovered.

SULHAM.—A Burial Place of the Bronze Age.—In *Proc. Soc. Ant.* XXI, 1907, pp. 308-314, O. A. SHRUBSOLE describes a burial place of the bronze age found at Sulham in 1906, and records other undescribed burial places of the same period in Berkshire.

WEYBRIDGE.—A Bronze Bucket of the Early Iron Age.—In *Proc. Soc. Ant.* XXI, 1907, pp. 464-469 (pl.; fig.), W. DALE publishes a bronze bucket of the early iron age found at Weybridge in Surrey. R. A. SMITH shows that it belongs to a well-known Hallstatt type and that it is the first of its kind to be found in Britain.

AFRICA

CARTHAGE.—A Dedication to the God Hero.—A. MERLIN publishes in *B. Soc. Ant. Fr.* 1908, pp. 128-131, a short dedication to the god Hero or Heros recently found at Carthage. This god had an important place in the religion of the eastern part of the Roman empire, especially in Thrace, along the Danube, in Asia Minor and in Egypt, but no reference to him has been previously found in northern Africa. The name was probably originally *Ἡρων*, as the genitive form *Ἡρωνος* shows, and was not of Greek origin. The god is usually represented as a horseman or hunter armed with a spear and accompanied by a dog or a boar.



FIGURE 8.—BRONZE EROS
FROM MAHDIA.

MAHDIA.—Bronzes from the Sea.—In *C. R. Acad. Insc.* 1908, pp. 245-254 (5 figs.), 386-388, A. MERLIN gives an account of the ancient bronzes found in the sea off Mahdia. In June, 1907, the crew of a Greek boat fishing for sponges found, about 7 km. northeast of Cape Africa and halfway between Thapsus and Sullectum, a great mass of ancient remains. They lie at a depth of 42 m. There are three heaps of columns in the midst of which were found objects of bronze. Some of these were too heavy to move, but several pieces were brought to land. The most important are: 1. A nude Eros, 1.40 m. high, standing with the weight on the left leg and

the right leg drawn back (Fig. 8). The right hand touches the side of the head. The hair, which consists of little curls, is cut short in front and is crowned with a garland of leaves. The left arm and part of the left thigh are missing. The feet are still filled with lead run in to preserve the equilibrium. The head bears some resemblance to certain heads of athletes, but the figure, as a whole, has much charm and is probably a copy of a bronze Eros of Praxiteles. 2. A Dionysus in the shape of a herm 1 m. high. The god is represented with a long beard. The pillar is slightly broken at the bottom, but the figure is otherwise perfect. It bears the inscription Βόθρος Καλχηδόνιος ἐποίησεν. Boethus is known for his group of the boy and the goose. 3. Two female heads in high relief, 0.20 m. high, which decorated the angles of two cornices (Fig. 9). The heads are similar, but not quite alike. Both had the pupils of the eyes set in. Among the other objects are the statuette of an Eros 0.32 m. high; a mask representing a laughing child; three lamps of rather elaborate pattern; two small columns, one 1.50 m. high with a Corinthian capital; and various ornaments from furniture. A circular piece of marble carved with acanthus leaves and acorns was also recovered. All of these objects must have been lost in a shipwreck.



FIGURE 9. — HEAD AS CORNICE DECORATION.

TUNIS.—The Roman Road from Theveste to Thelepte.—The numerous milestones along the line of the Roman road between Theveste and Thelepte have led DONAU to examine its present condition. His results are published in *M. Soc. Ant. Fr.* LXVII, 1907, pp. 137-215. The ancient road can be traced for its whole length. The first forty-six milestones are numbered from Theveste, the remaining eight from Thelepte. At several places crossroads led to ancient towns now masses of ruins. The road to Cillium (Kasserine) branched off at the fiftieth milestone. Seventy-eight inscriptions found along the way accompany the article. An effort was made to trace the Roman road from Thelepte to Capsa, but it could be followed with certainty only to the seventh milestone from each end. Five more inscriptions found along this route are published.

UCHI MAIUS—New Inscriptions.—In *Notes et Documents*, II, 1908, pp. 1-125 (7 figs.; map) A. MERLIN and L. POINSSOT publish with comment 182 Latin inscriptions found by Captain H. Gondouin at the site of Uchi Maius, the modern Henchir ed-Douamis in Tunis. A brief account of the site and of the remains of the principal buildings serves as an introduction.

UNITED STATES

BOSTON. — **Enamelled Tiles from Egypt.** — In *B. Mus. F. A.* VI, 1908, pp. 47-50 (11 figs.) L. E. R. publishes briefly a series of enamelled tiles in the Boston Museum of Fine Arts which once formed a part of the wall decoration of a building of Rameses III. It includes portraits in color of Syrians, Philistines, Amorites, Hittites, and natives of Kush.

CHICAGO. — **Recent Acquisitions of the Art Institute.** — The Art Institute of Chicago has recently acquired fourteen Greek vases mostly from the Van Brantegheim collection in Brussels. Among them are three white lecythi, one of which is inscribed Εὐαίων καλός (Klein, *Liebblingsinschriften*, p. 70), and a red-figured cylix inscribed Ἰπποδάμης καλός (Klein, *ibid.* p. 55). A Roman lamp with a figure of Victory bears the inscription *Annum novum faustum felicem mihi (agas)*. It is published by Fröhner in *La collection Eugène Piot (Bulletin Art Inst. of Chicago, I, 1908, pp. 12-13 and 29)*.

NEW YORK. — **METROPOLITAN MUSEUM.** — **Recent Acquisitions.** — In addition to material from the pyramid at Lisht the Metropolitan Museum of New York has recently acquired two offering chambers from mastaba tombs of the fifth dynasty at Sakkara. The walls of both are covered with reliefs representing the best work of the Old Empire. One of the chambers was published by Mariette (*Mastabas Tomb D, 3*). A granite statuette of a priest of the twenty-sixth dynasty, a bronze statuette of Neith of the same period, and a sphinx of quartzite, bearing the head of Thothmes III, were also acquired. (A. M. L. in *B. Metr. Mus.* III, 1908, pp. 220-223; 5 figs.)

EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL, AND
RENAISSANCE ART

GENERAL AND MISCELLANEOUS

EGYPT. — **KARM ABOUM.** — **The City of St. Menas.** — At Karm Aboum (Abu Mena), in the Mareotic desert, C. M. Kaufmann and J. C. Ewald Falls, aided by a subvention from the city of Frankfort, have uncovered (1905-08) a great Christian sanctuary (of St. Menas), with basilicas, a baptistery, and bathing establishment. Inscriptions, ostraca, etc., were found in great numbers. The constructions date from the fifth to the ninth century. (*R. Arch.* XI, 1908, p. 418, from C. M. KAUFMANN, *Frankfurter Zeitung*, April 10, 1908.)

OASIS OF KHARGA. — **Recent Excavations.** — In *B. Metr. Mus.* III, 1908, pp. 203-208 (7 figs.), A. M. L. (YTHGOE) reports upon his excavations in the Christian cemetery of El Bagawat, oasis of Khaga, in the spring of 1908. The numerous tomb chapels were found to be of mud brick faced with white plaster. They are usually square, roofed with domes, and show a mixture of classical and Egyptian motives. The tombs provided with such chapels consist of the chapel itself with a perpendicular shaft, usually in the centre, cut in the rock to a depth of about three metres and having a burial chamber at the bottom. The bodies were wrapped in many thicknesses of cloth, bound outside with flat bands crossing and re-crossing in a diamond pattern, and were not enclosed in coffins. Most of the chapels were without decoration, but in one the walls were covered with

pictures of allegorical and biblical personages, and in another with biblical scenes. There are many Coptic and Arabic *graffiti*, interesting epigraphically, upon the walls. The ordinary graves with superstructure consist of the grave itself cut in the sandstone rock and covered with a low superstructure, either rectangular or oval. An examination of the mound of Ain el Turba, near the cemetery, showed that it originally consisted of houses of mud brick. Much pottery was found here, besides ostraca, wooden tablets inscribed in Greek, etc. The coins date from Constantine to Arcadius, thus dating this group of houses in the fourth century.

PARKIN.—*An Inscription of an Armenian King.*—In *Klio*, VIII, 1908, pp. 497–520 (pl.; 2 figs.), C. F. LEHMANN-HAUPT publishes a long, though much injured, Greek inscription at Farkin, the ancient Tigranocerta, in Armenia. It is cut upon eight blocks of the town wall and concerns the dealings of an Armenian king with the inhabitants of Tigranocerta, who had rebelled and fought against him. He argues that the king was Pap and that the inscription should be dated in the year 372 A.D.

PALESTINE.—JERUSALEM.—*The Frescoes of the Church of the Cloister of the Holy Cross.*—A. BAUMSTARK, in *Monatshefte f. Kunstwiss.* I, 1908, pp. 771–784, describes and illustrates the frescoes adorning the walls of the Church of the Cloister of the Holy Cross, situated on the hills west of Jerusalem. They are dated by inscriptions in the seventeenth century, but the writer believes that they are restorations after much earlier originals, which possibly date back to the eleventh century. Much interest is attached to the frescoes by reason of their departure in many respects from the Byzantine iconography set forth in the famous Painters' Manual of Mt. Athos.

TURKEY.—SALONICA.—*Mosaics in Hagios Demetrios.*—Repairs to the church of Hagios Demetrios in the early part of 1908 brought to light a series of interesting mosaics, which are closely related to those of S. Apollinare Nuovo at Ravenna, but differ from these in having to do, not with a number of saints, but chiefly with St. Demetrios alone. They also furnish evidence regarding the origin of the quadrate nimbus. (J. STRZYGOWSKI, in *Monatshefte f. Kunstwiss.* I, 1908, pp. 1019–1022.)

DENMARK.—NIVAAGAARD.—*A Madonna by Luini.*—G. FRIZZONI publishes, in *Rass. d'Arte*, VIII, 1908, pp. 135–136, a Madonna by Luini, which is now in the Hage collection at Nivaagaard, Denmark. It belonged formerly to Sir George Donaldson in London.

NORWAY.—OSEBERG.—*A Viking Ship.*—In *C. R. Acad. Insc.* 1908, pp. 389–394, G. GUSTAFSON describes a richly ornamented Viking ship found in a circular mound at Oseberg, 100 km. south of Christiania. It is entirely of oak, 21.50 m. long and 5 m. wide, and had fifteen oars on each side. A small burial chamber of wood was erected in the ship, and two bodies, perhaps of a queen and her servant, laid in it. The tomb had been robbed long ago, but objects in other parts of the ship were undisturbed. Among them was a four-wheeled chariot complete and four sledges. The chariot was adorned with reliefs of fantastic animals, two small scenes, human heads, etc. The ornament shows two styles, one being the last phase of an ancient art, the other derived from the Carolingian Renaissance. The ship dates from about 800 A.D., and is the finest of the three which have so far been found. It will be set up in the museum at Christiania.

SWITZERLAND. — BERN. — A Reconstructed Altar-piece. — Four panels of an altar-piece, bearing scenes from the history of St. John Baptist, are preserved in the Bern Museum of Art, where they are ascribed to Heinrich Bichler. H. Voss, in *Monatshefte f. Kunstwiss.* I, 1908, pp. 754-762, publishes three other panels of the same altar-piece, one of which he discovered in the Buda-Pesth Gallery, the other two in the castle of the Knights of St. John at Sonnenburg. He dates the altar in the closing years of the fifteenth century and assigns it to the "Master of the Carnations."

ITALY

BOLOGNA. — Acquisitions of the Pinacoteca. — The Pinacoteca at Bologna has recently received a David with the Head of Goliath by Carlo Dolci. (*Monatshefte f. Kunstwiss.* I, 1908, p. 1135.)

An Inscribed Crucifix. — A crucifix preserved in the Museo Civico at Bologna has the following inscription engraved upon it, being a dialogue between Christ and the Virgin, showing that the Crucified Christ once formed part of a larger group: *Fili! Quid, mateur (sic). Deus es. Sum. Cur ita pendes? Ne genus humanum c(on)vergat in interitum. Pacem satis inter vos (h)abentis.* The artist's signature follows: *Petrus Alberici me fecit cum patre.* Above the nimbus of the Crucified is still another inscription, which gives us the date of the work: *ano (sic) MC. quo numerato et quinquageno nono post associato, i.e. 1159.* (F. DE MÉLY, in *B. Soc. Ant. Fr.* 1908, pp. 172-174.)

CAMPIONE. — New Monuments of Lombard Art. — F. MALAGUZZI VALERI, in *Rass. d'Arte*, VIII, 1908, pp. 167-174, describes the artistic treasures of the Lombard town of Campione, particularly those contained in the *Santuario*. Besides sculptures of the school of Amadeo and the Rodari, and frescoes of the fifteenth and sixteenth centuries, the church contains paintings of capital importance for the history of the early Lombard school: a series of frescoes on the north wall, representing scenes from the life of the Virgin and St. John Baptist (Fig. 10), and a large Last Judgment in the north portico, signed by Lanfranco dei Veri and his son Filippolo, — names entirely new in the history of Lombard art, — and dated 1400. The style is noteworthy for the use of agitated gestures to give expression, and the introduction of contemporary costume and episode.

CANTELUPPO. — Forgeries of Artists' Autographs? — V. FEDERICI, in *Arch. Stor. Patr.* 1907, pp. 486 ff., published a series of eighteen documents which he discovered in the Archivio Camuccini in Cantelupo. They record payments made from the papal treasury to various artists and receipts therefor, the list beginning with Donatello and ending with Bernini. But one of the payments purports to be made to Masaccio in 1438, or ten years after his death, another contains the receipt in Michelangelo's hand for a sum paid him in 1517, during the whole of which year he was at Carrara and Florence, etc., etc. Such inconsistencies point to bare-faced forgeries, and the documents are so considered by G. GRONAU (*Monatshefte f. Kunstwiss.* I, 1908, pp. 673-675), who points out that the Camuccini collection was made in the sixties of the last century, at a time when such forgeries were rife.



FIGURE 10. — FRESQUES AT CAMPIONE.

CARPINETA. — **A Madonna by Paolo da Venezia.** — There is a Madonna by Paolo da Venezia in the parish church of Carpineta, near Cesena, signed †PAVLVS DE VENECIIS PIXIT | MCCCXLVII. (G. GIGLI in *Rass. d'Arte*, VIII, 1908, p. 182.)

CHIETI. — **A Novelty of Iconography.** — In *Bollettino d'Arte*, II, 1908, pp. 396-397, A. COLASANTI publishes a curious Madonna which is preserved in the *municipio* at Chieti. The Virgin is represented with nude breasts

from which spring streams of milk directed to the mouths of suffering souls in purgatory, who rise amid flames from little holes in the ground about her. The writer assigns the picture to Cola d'Amatrice.

FIESOLE.—**Curious Barbarian Burial.**—On the northwest declivity of Fiesole, within the limits of the ancient ring wall, were discovered remains of a house of late date facing upon a street, and buried in a grave constructed immediately before the front door, and at right angles to it (therefore under the roadway), in such a manner that the feet were directly under the threshold, a skeleton, recognized by the accompanying articles to be that of a woman. The pottery showed the burial to date from the age of the barbarian invasions, between the Gothic and Langobardic domination. The grave was indubitably constructed while the house was inhabited, or habitable. (A. PASQUI, *Not. Scav.* 1907, pp. 728-731; 2 figs.)

FLORENCE.—**Projected Changes in the Uffizi.**—It is proposed, in order to protect the Uffizi from danger of fire, to tear down the adjacent buildings and isolate the gallery in the midst of a park. The post-office and the library are, according to the proposed plans, to be moved elsewhere. The archives will remain. The room thus acquired will be used for housing the pictures now in the Academy, the tapestries now in the Museo Archeologico, the contents of the Museo Archeologico itself, and a sculpture gallery formed from the pieces in the Uffizi and those in the Bargello. A cast collection will also eventually be installed in the Uffizi. The Bargello will be turned into a museum of industrial art. (A. GOTTSCHESKI, *Monatshfte f. Kunstwiss.* I, 1908, pp. 452-454.)

Recent Acquisitions of the Uffizi.—These are: two panels painted on both sides with the subject of the Crucifixion, Flight into Egypt, Massacre of the Innocents, and St. Joseph between Two Shepherds, by G. F. Carotto (*Rass. d'Arte*, July, 1908, *Cronaca*); a drawing by Titian (the sketch for the portrait of Francesco Maria Rovere); and a portrait of Girolamo Romanino by the painter himself. (*Monatshfte f. Kunstwiss.* I, 1908, pp. 1133-1134.)

A Drawing by Titian.—E. JACOBSEN continues his study of drawings by Titian (cf. *A.J.A.* XII, p. 382) with the publication of a sketch in the Uffizi, a study for the figure of Jacopo Pesaro, kneeling before the Virgin in the famous Madonna of the Pesaro family, in the church of the Frari in Venice (*Gaz. B.-A.* XL, 1908, pp. 113-119.)

A Fourteenth Century Madonna.—The restoration and opening of the tabernacles of Florence has been determined upon by the city administration. This has called attention to one of these tabernacles, situated at the corner of Via della Chiesa and Via del Leone. Closed until now, its reopening has disclosed a Madonna with Saints John and Bernard (?), showing a mixture of the Sienese and Giottesque. It is possibly the work of Maso Fiorentino. (L. H. in *Chron. Arts*, 1908, p. 412, after A. CHIAPPELLI in *Giornale d'Italia*.)

The Frescoes at Le Campora.—The frescoes in the chapel of the Augustinian cloister at Le Campora, south of Florence, are described by O. SÉNÉ in *Monatshfte f. Kunstwiss.* I, 1908, pp. 503-510. They relate to episodes in the life of St. Anthony. He dates them about 1372-1375 and assigns them to a close follower of Giotto's style, possibly Michelino.

A New Filippo Lippi.—Carlo Gamba has recognized in a painting preserved in the church of S. Gaetano, hitherto ascribed to Ghirlandaio's

School, a work of Filippo Lippi. It is the central group of a Crucifixion, cut out of a larger composition, and represents the Crucified, with the Magdalen prostrate at the foot of the cross, and Sts. Jerome and Francis kneeling at either side. (A. GOTTSCHIEWSKI, *Monatshefte f. Kunstwiss.* I, 1908, pp. 548-549.)

GENOA.—**Four Pictures by Tiepolo.**—There are at Genoa four pictures by Tiepolo illustrating episodes from *Gerusalemme Liberata*: the Love of Rinaldo and Armida, the Arrival of Ubaldo and Guelfo at the Enchanted Isle, the Parting of Rinaldo and Armida, and the Departure of Rinaldo for the Crusades. They belong to Sig. A. P. Cartier, who submitted them recently to the Brera for judgment. This occasioned their publication in *Rass. d' Arte*, VIII, 1908, p. 179, by F. MALAGUZZI VALERI.

LUCCA.—**Frescoes by Benozzo Gozzoli.**—Repairs to the church of S. Francesco in Lucca having occasioned the removal of a thick coat of plaster from one of the chapels, it appeared that the lunettes of its walls were adorned with frescoes by Benozzo Gozzoli. The Nativity on the left wall is nearly all gone, as well as the Annunciation on the altar wall. But the Presentation of the Virgin and a *Sposalizio* in the right wall are practically intact save for a ruined space between the scenes. The treatment is remarkable, both scenes being combined into one composition. (NELLY ERICHSEN, *Rass. d' Arte*, VIII, 1908, pp. 75-76.)

MILAN.—**A Relief by Bambaia.**—D. SANT'AMBROGIO publishes in *Rass. d' Arte*, VIII, 1908, p. 79, a relief in the Castello Sforzesco representing the martyrdom of St. Agnes, which he attributes to Agostino Busti, called the Bambaia.

Acquisitions of the Brera.—The Brera at Milan has acquired a "Portrait of a member of the house of Martinengo" by Romanino (reproduced in *Rass. d' Arte*, VIII, 1908, p. 103) and a St. Jerome by Cesare da Sesto (*Monatshefte f. Kunstwiss.* I, 1908, p. 560).

Acquisitions of the Poldo-Pezzoli Museum.—The Poldo-Pezzoli Museum has acquired the Triumph of Bacchus and Ariadne by Cima da Conegliano (*Monatshefte für Kunstwissenschaft*, I, 1908, p. 560; discussed by G. FRIZZONI in an article on Cima's mythological pictures, in *Rass. d' Arte*, 1908, pp. 41-42); a Madonna by Jacopo Bellini; a signed picture by Basaiti; and a composition by Lorenzo Lotto. (F. MALAGUZZI VALERI, *Rass. d' Arte*, VIII, 1908, p. 166.)

ORTE.—**Ancient Tomb used again in Byzantine Period.**—In the locality near Orte called "Le Cese" an ancient tomb has been found with an inscription AGATO + ET + AGATI + PR +, the Latin cross being used for interpenetration. The inscription is apparently no earlier than the sixth century A.D. (A. BARTOLI, *Not. Scav.* 1907, pp. 433-437; fig.)

PERUGIA.—**An Early Work of Perugino.**—A. LUPATELLI communicates to *Rass. d' Arte*, VIII, 1908, pp. 90-94, an Annunciation in the possession of Count Emanuele Raineri of Perugia, which is obviously an early work of Perugino's. The interest of the picture lies in the fact that the artist has repeated, with transposition, the architectural background of Fiorenzo di Lorenzo's Miracle of S. Bernardino in the Perugia Gallery.

PIACENZA.—**Sketches by Pordenone.**—A. PETTORELLI illustrates in *Rass. d' Arte*, VIII, 1908, pp. 175-179, a series of painted sketches by Pordenone, most of which are designs for the *putti* of the cupola of S. Maria di Campagna at Piacenza.

PISA.—**Discovery of a Fresco.**—On that façade of the Hospital which looks toward the Cathedral at Pisa, a fresco of 1300 has been discovered, representing the Madonna with four saints. (*Rass. d'Arte*, VIII, 1908, July, *Cronaca*.)

RAVENNA.—**Discoveries in the Sarcophagus of S. Rainaldo.**—The opening of the tomb of Rainaldo Concorreggio († 1321) brought to light a number of well-preserved fragments of his pontifical robes, two silver glove-clasps ornamented with busts of Christ and the Virgin in *cloisonné*, and an engraved stone with the figures of Adam and Eve. (*S. MURATORI, Bollettino d'Arte*, II, 1908, pp. 324–337.)

ROME.—**Acquisitions of the Corsini Gallery.**—The Corsini Gallery has recently acquired the Adoration of the Shepherds and the Baptism of Christ by Greco. (*Chron. Arts*, 1908, p. 387, described by A. Rossi, *Bollettino d'Arte*, II, 1908, pp. 307–314.)

An Acquisition of the Vatican.—The Vatican has just received a collection of seventeen thousand coins, among them the one piece which

was still lacking in the series of Papal coins, a *scudo d'oro* bearing the image of Innocent IX. (*Chron. Arts*, 1908, p. 239.)

A Gothic House in Rome.—The origin of the name *Argentina*, given to the tower which used to dominate that quarter of Rome which centres around the Via del Sudario, has always troubled topographers. It now appears that it is derived from *Argentina* or *Argentoratum*, the Latin name for Strassburg, the native city of the builder of the house to which the tower belonged, i.e. Burekard, *ceremoniarius*, of Alexander Borgia. The house is a pure example of German Gothic and was built not long before



FIGURE 11.—TWO FIGURES FROM RAPHAEL'S SCHOOL OF ATHENS.

1503. It is now in part transformed into the Teatro Argentina. (*M. PERNOT, Chron. Arts*, 1908, pp. 289–290, after GNOLI, *Nuova Antologia*.)

A Tomb by Donatello.—R. CORWEGH in *Z. Bild. K. N. F.* XIX, 1908, pp. 186–188, publishes the tomb plate of a certain *Magister Jo. Scade* in

S. Maria del Popolo, which, by comparison with the tomb of Giovanni Crivelli, in S. Maria Araceli, he assigns to Donatello.

The Early Church of St. Chrysogonus.—Excavations under the sacristy of S. Crisogono in Trastevere have brought to light the apse of the primitive basilica, dating from the fifth century. The apse is decorated with paintings in imitation of *opus sectile marmoreum*, and has a confession, on the walls of which are traces of frescoes of the early Middle Ages. (O. MARUCCHI, *N. Bull. Arch. Crist.* 1908, pp. 149-150.)

Interesting Discoveries through Photography.—Three photographs are published by M. SEELIGER in *Monatshefte f. Kunstwiss.* I, 1908, pp. 791-794, which give remarkably clear evidence as to the technical methods of Raphael and Michelangelo. The first reproduces one of the *ignudi* of the Sistine ceiling and shows when the artist finished one day's work and began the next. Another shows the incisions made by the stylus in transferring to the wet plaster from the cartoons the lines of two figures of the School of Athens (Fig. 11). The third shows that Raphael painted the portrait of Julius II in the Miracle of Bolsena first as a beardless man with short hair, and afterward as bearded and with long hair.

SICILY.—**Gothic Doors and Windows.**—L. FIOCCA, in *Russ. d' Arte*, VIII, 1908, pp. 146-150, illustrates a series of Gothic portals and windows in Messina, Syracuse, Catania, Palermo, and other places.

TEANO.—**Christian Mosaic.**—An unfinished mosaic found at Teano, representing the Adoration of the Magi, is described at length by V. SPINAZZOLA in *Not. Scav.* 1907, pp. 697-703 (figs.).

TORCELLO.—**A Madonna by Domenico Gaggini.**—A Madonna by Domenico Gaggini, recently discovered in the cathedral at Torcello, shows that before he went to Sicily in 1465, Domenico must have resided on the peninsula not only at Naples and Genoa, but also at Venice or its neighborhood. (F. BURGER in *Monatshefte f. Kunstwiss.* I, 1908, pp. 653-654.)

VENICE.—**Acquisitions of the Academy.**—The Accademia di Belle Arti has recently acquired a portrait by Lorenzo Lotto; a Nativity, assigned to the same master, but of doubtful authenticity; an Adoration of the Magi, by Jacopo da Ponte; an Angel by Pier Maria Pennacchi; part of a polyptych of the Annunciation, with Saints; a Madonna in fresco, by Giovanni Buonconsiglio; two mythological pictures by Sebastiano Ricci; two landscapes with figures by Giambattista Zeis; a Madonna with Angels signed by Giovanni Francesco dal Zotto; a Mary in the Temple by Tintoretto (L. BROSCH, *Monatshefte f. Kunstwiss.* I, 1908, pp. 316-317); a Madonna and S. Rocco by Francesco Morone; and a Family Group by Bernardino Licinio (*ibid.* pp. 1135-1136).

A Nativity by Lorenzo Lotto.—In *Bollettino d' Arte*, II, 1908, pp. 298-302, G. SINIGAGLIA describes a picture recently acquired by the Royal Galleries at Venice, which is the one described by Vasari, in his life of Lorenzo, as *finta in una notte*. The painting is remarkable for the lighting.

VERONA.—**Gold Ornaments of Barbarian Period.**—A tomb at Verona yielded four gold ornaments of a "barbarian" style: a cross of Maltese shape, decorated with a pattern of interlacing bands and dots and designed to be attached to clothing, two earrings of the "canestrino" type, and a finger ring. (G. GHIRARDINI, *Not. Scav.* 1908, pp. 121-124; 2 figs.)

A Fourteenth Century Crucifixion.—G. GEROLA, in *Bollettino d' Arte*,

II, 1908, pp. 303-306, publishes a group of statuary representing the Crucifixion, of which the Virgin, fainting in the arms of Veronica, is already in the Museo Civico at Verona, but the other members, the Crucifix, a kneeling Magdalen, and St. John, are to be found in the parish church at Cellore.

A Portrait of Pliny the Younger.—The figure carved in bas-relief on the upper pilaster at a corner of the Palazzo del Consiglio in Verona, once supposed to be the architect of the building, or Fra Giocondo, is now proved by the inscription carved on the book he holds and by the accounts of the building in the fifteenth century to be an effigy of Pliny the Younger. He is represented in half-figure and dressed in the garb of a French Dominican. (G. DA RE, *Madonna Verona*, 1908, pp. 105-109.)

The Year of Pisanello's Birth.—Professor Biadego has proved by documentary evidence that Pisanello was born in 1397, and not in 1380, as hitherto supposed. Inasmuch as the finest of the miniatures of the *Livre d'Heures* of the Duc de Berry at Chantilly were executed prior to 1416, it can no longer be doubted that the close resemblance of these miniatures to Pisanello's works is derived from their influence upon the Italian artist, and not the reverse. (S. REINACH, *C. R. Acad. Insc.* 1908, pp. 371-372.)

SPAIN

GRANADA.—**An Unpublished Collection of Paintings.**—Of the notable collection of paintings which Queen Isabella assembled at Granada in the Royal Chapel, some are concealed in obscure places, while thirty panels, belonging to triptychs or diptychs or isolated, have been inserted into the interior of the doors of the great reliquary, which, being opened but four times a year, has effectually concealed them until now. A description of this valuable collection, together with reproductions of the most important pieces, is contributed to *Gaz. B.-A.* XL, 1908, pp. 289-314, by M. GÓMEZ-MORENO. The article is translated by E. BERTAUX, who contests some of the author's attributions, notably a triptych of the Deposition, Calvary, and Resurrection, which Gómez-Moreno gives to van Outwater, while Bertaux agrees with Justi in assigning it to Thierry Bouts, and a Christ in the Garden, in which Bertaux refuses to see, as the author does, the hand of Botticelli, and assigns the picture to his school. Other painters represented in the collection are Hans Memling and Roger van der Weyden, two panels of whose famous triptych at Berlin are exactly repeated in two panels of the Granada collection. In response to questions whether the Berlin or the Spanish version is the original, W. BODE writes, in *Amtliche Berichte aus den kgl. Kunstsammlungen*, XXX, 1908, pp. 29-35, that in his opinion the Granada panels belong to the original altar which Pope Martin V gave to John II, father of Isabella, while the Berlin triptych is a replica made in Roger's own studio, and may still be the one which was once in the Carthusian monastery of Miraflores near Burgos, and was carried by Charles V on his travels.

PAMPELUÑA.—**A Flemish Artist in Navarre.**—E. BERTAUX has discovered in the archives of Navarre a document which shows us that the real appellation of Johan Lome, sculptor of the tomb of Charles the Noble and his queen in the cathedral of Pampeluña, was *Johan le home de Tornay*, as the official Spanish puts it, showing the existence of a Flemish school of

sculptors working in Spain in the first half of the fifteenth century. A number of works in Northern Spain may be given to *Janin Lomme* or to his school. (*Gaz. B.-A.* XL, 1908, pp. 89-112.)

FRANCE

ÉTAMPES.—**An Unknown Fresco.**—The *grenier* of the barracks of the gendarmerie of Étampes contains an ancient fresco, which apparently represents the donation of the county of Étampes to Louis d'Evreux by Philippe le Bel in 1307. (*STEIN, B. Soc. Ant. Fr.* 1907, pp. 329-330.)

LYON.—**The "History of the Magi" on a Carolingian Ivory.**—A Carolingian ivory plaque of the Musée de Lyon contains three scenes: the Adoration of the Magi; An Angel appearing to the Magi in sleep and pointing them the way; The Return of the Magi. The Return of the Magi is very rare before the Romanesque period. The Angel is equally rare, but appears in a similar scene in the manuscript of Gregory Nazianzen in the Bibliothèque Nationale (ninth century). (*A. BOINET, B. Soc. Ant. Fr.* 1908, pp. 115-120.)

MAISONNAIS (CHER).—**A Gothic Madonna.**—A Virgin and Child of the church of Maisonnais, which dates from the beginning of the fourteenth century, is remarkable for the heart which the virgin holds in her right hand. This refers no doubt to the relic of a priory of the neighborhood, called the *Prieuré d'Orsan*. This relic was the heart of Robert d'Arbrissel, founder of the priory, and the Madonna must therefore be the Notre Dame d'Orsan which once existed in this monastery. Another group, representing St. Anne and the infant Mary, is also preserved in the church of Maisonnais, and dates from the middle of the sixteenth century. It likewise comes in all probability from the *Prieuré d'Orsan*. (*F. DESHOULIÈRES, B. Soc. Ant. Fr.* 1908, pp. 90-94.)

PARIS.—**A Byzantine Coin-Weight.**—In *R. Ital. Num.* XXI, 1908, pp. 45-54 (fig.), E. BABELON describes and comments upon a small square plate of lead recently acquired by the Cabinet des Médailles at Paris. The plate is inscribed ΠΘΑΥΧΡΟΝΙΟΥ + + + ΟΒΡΥΖΟΝ, and weighs 21.52 gr. The author believes it to be the official weight of the amount of refined or coined gold delivered by the mint for an ounce (27.28 gr.) of crude gold delivered to it by an individual, the difference between the full ounce and this weight being the profit of the mint. The proper name would be that of the mint-official certifying the weight as accurate.

Acquisitions of the Louvre.—The Louvre has recently acquired: a portrait of an aged woman by Memling (*Chron. Arts*, 1908, pp. 226-227); a Christ with the Crown of Thorns by Murillo, formerly in the Beresford Hope collection (*ibid.* p. 250); the Prisoner of Murillo, bequeathed by Charles Drouet (*ibid.* p. 306); a portrait of a certain Pierre Quthe by François Clouet (the only picture signed by this artist), dated 1562 (*Burl. Mag.* XIII, 1908, pp. 230-233).

Stained Glass of the Thirteenth Century.—The Louvre has recently acquired the second medallion of what was originally a series of stained glass compositions, which may have ornamented a window in the church of St. Nicaise at Reims, destroyed in 1799. The medallions represent the martyrdom of St. Narcasius, and the funerals of himself and his sister St.

Eutropia. They date from the middle of the thirteenth century. (MARQUET DE VASSELLOT, *B. Soc. Ant. Fr.* 1908, pp. 80-84.)

Acquisitions of the Musée de Cluny.—The Musée de Cluny has recently made the following acquisitions: a series of pieces of Italian faïence of the fourteenth century (legacy of M. Balet); a number of ivory figurines of the Virgin, and bronze objects of the thirteenth century (legacy of M. de Forey); a figure of the Dead Christ, of the school of Toulouse (fifteenth century); and a sixteenth century door panel carved with a male portrait. (*Chron. Arts.* 1908, p. 262.)

Italian Works in the Museum of Decorative Arts.—In *Gaz. B.-A.* XI, 1908, pp. 402-416, C. LOESER describes the following paintings of Italian origin in the Musée des arts décoratifs: two cassone fronts by artists working under the influence of Cosimo Rosselli, the one representing the Betrothal of Dido and Aeneas, the other a Madonna with Sts. John Baptist and George; a small Martyrdom of St. Sebastian, Venetian, showing the influence of Mantegna and Antonello, and perhaps by Parentino; a large altar-piece recalling the early manner of Bonsignori; a crucifixion of the Ferrarese school; and a Giottesque panel, perhaps by Bernardo Daddi, representing a Miracle of St. Peter Martyr. Among the sculptures described are: a Florentine coffer with figures in relief, in the style of the Pollaiuoli; another in wood of Lombard workmanship dating from the early sixteenth century; a third, also in wood, belonging to the Bolognese school of the end of the Cinquecento; a sculptured stool of the same period; a Pietà in polychrome faïence of the sixteenth century; a St. John in terra-cotta, by Minelli, and a seated Madonna, also by Minelli, or one of his pupils.

The Signature of Quentin Matsys.—The actual signature of the "Banker and his Wife" in the Louvre is not *Quentin Matsys Schilder 1518* (or 1519), but *Quinten Matsys schildert* (painted) 1514. This spelling of his first name is borne out by the signature on a Head of an Old Man in the collection of Mme. Édouard André: *Quintinus Matsys pingebat*. Matsys was the inventor of this popular *motif* of the "Banker and his Wife," and not Marinus, whose first rendering of the subject dates from 1538. (F. DE MÉLY, *Gaz. B.-A.* XI, 1908, pp. 215-227.)

VERNEUIL.—**A Holy Sepulchre of the Sixteenth Century.**—D. ROCHE in *Gaz. B.-A.*, XXXIX, 1908, pp. 403-420, describes and illustrates a Holy Sepulchre group, consisting of eight figures of the French school of the sixteenth century, which are scattered about the chapel of the chateau of Verneuil, a seat of the Counts de la Rochefoucauld.

BELGIUM AND HOLLAND

BRUSSELS.—**Acquisitions of the Museum.**—The old Museum at Brussels has acquired a Last Supper ascribed by H. Hymans to Pierre Coecke (1502-1550) and a Hunting Scene by Jan van Kessel the elder. (*Monatshefte f. Kunstwiss.* I, 1908, p. 678.)

NAMUR.—**The Evangeliarium of St. Nicolas d'Oignies.**—An evangeliarium which once formed part of the treasure of the priory of St. Nicolas d'Oignies, and is now preserved in the convent of the Soeurs de Notre-Dame at Namur, is described by W. H. JAMES WEALE in one of his series of articles upon this treasure, in *R. Art Chré.* IV, 1908, pp. 155-158. The

covers are of silver on wood, the upper one being adorned with a Crucifixion in relief surrounded by two bands of extremely delicate ornament, while the lower displays Christ enthroned, surrounded by the symbols of the Evangelists. On the lower cover, the outer band of ornament is broken by six panels of niello work, one of which contains the portrait of HVGO, the author of the work, who is represented kneeling and offering his book. The mention of the feast of St. Francis, the office for which was promulgated in 1229, shows that the work is later than this date, while the addition in another hand of the office for the Fête-Dieu, instituted in 1246, gives a lower date for the work.

Aquisitions of Dutch Museums.—The Rijksmuseum at Amsterdam has acquired from the Six collection thirty-nine paintings, of which the most important are the following: the Milk-maiden by Jan Vermeer van Delft; the Lute-player by Judith Leyster; the Skaters by Adriaen van Ostade; the Herring-seller by Gabriel Metsys; the Stable by Philip Wouwerman; and the Resting Shepherd Family by Adriaen van de Velde. The Museum at Leyden has recently received a Portrait-study by Rembrandt, the Lovers beneath a Tree by Jan Steen, and other accessions. (K. FRIESE in *Monatshefte f. Kunstwiss.* I, 1908, pp. 281-301.)

VEUR.—**A New Jan Steen.**—K. FRIESE notes in *Monatshefte f. Kunstwiss.* I, 1908, p. 1140, the discovery of a picture by Jan Steen in the possession of J. Boer at Veur near Leidschendam. It represents a funeral, depicting the bier and bearers before a house, with a group of mourners.

GERMANY

ACQUISITIONS OF GERMAN MUSEUMS.—The Museum at Frankfort is now in possession of the results of C. M. Kaufmann's excavations at Karm-abu-Mina in Upper Egypt (see *A.J.A.* XI, 1907, p. 372). From the Rudolph Kann collection, the picture gallery has received the Portrait of an Aged Diplomat by Rubens. At Stuttgart the Painting Gallery has recently acquired a Christ on the Mount of Olives and a Flagellation by Burgkmair and the Martyrdom of St. James by an artist of the Regensburg School. (*Monatshefte f. Kunstwiss.* I, 1908, p. 451.)

A NEW FRAGMENT OF THE BIBLIA PAUPERUM.—J. KURZWEILY publishes in *Z. Bild.* K. N. F. XX, 1908, pp. 22-28, a fragment of a manuscript of the *Biblia Pauperum*, recently discovered by him, which dates from the early part of the fourteenth century, thus equalling in age the earliest known exemplars, and forming part of the original codex from which Cod. Max. 4 of the Grand-ducal library at Weimar and Clm. 23426 of the Munich Hof- und Staatsbibliothek were derived.

THE "BEAUTIFUL VIRGIN" IN OSTENDORFER'S WOODCUTS.—The fanatical devotion to the statue of the Virgin which was housed in a special chapel in Regensburg at the beginning of the sixteenth century is reflected in contemporary art, particularly in Altdorfer's work. C. DODGSON, *Monatshefte f. Kunstwiss.* I, 1908, pp. 511-516, publishes a series of woodcuts on the same theme by Ostendorfer.

BERLIN.—**Chief Acquisitions of the Museums.**—The section of Christian Sculpture has recently acquired: a polychrome wooden relief, Mourners at the Cross, of the Antwerp school at the end of the fifteenth

century; a relief in painted stucco of Alsatian workmanship, representing Christ on the Mount of Olives, and modelled after the Passion-altar (1518) of Kaysersberg in Elsass; another Alsatian relief, St. John Sleeping, of 1553, signed *Hans R.*; a panel from Augsburg (circa 1525, subject uncertain); a polychrome altar from Tyrol, representing the Madonna, Angels and Saints, possibly by Wolfgang Asslinger; another altar by some Swabian sculptor, from Augsburg (described by W. Vöge in *Ämtliche Berichte aus den kgl. Kunstsammlungen*, XXIX, 1908, pp. 143-151); four Madonnas from wooden altars of the early Gothic period, one from Le Vidan in the Cevennes, the others of Rhenish origin; a wooden angel of like date, from an altar group of a north French school (Vöge, *ibid.* pp. 168-172 and 1113-1114); a terra-cotta Madonna of the Middle Rhenish school, of the first half of the fifteenth century (Vöge, *ibid.* pp. 315-317); a terra-cotta polychrome Madonna of the end of the fifteenth century, belonging to the South Bavarian school; another of Swabian technique, also of painted terra-cotta, and of the same approximate date; a terra-cotta kneeling angel holding a scroll, and a Madonna of the same material, both of the early fifteenth century school of South Bavaria; a wooden Pietà of the early sixteenth century, and two figures from altar-wings, Sts. Agnes and Dorothea, also in wood and of like date, all three monuments of Bavarian origin (W. Bode, *ibid.* XXX, 1908, pp. 1-9); two Apostle-figures of the fifteenth century, assigned to Isaia da Pisa; a Madonna of the same date, probably of Siennese origin (SCHOTTMÜLLER, *ibid.* pp. 36-39). The Kupferstichkabinett has received: a drawing by Rembrandt of about 1650, representing The Blessing of Jacob by Isaac (described by LEHR, *ibid.* XXIX, 1908, pp. 160-161); a drawing by Jacob van Amsterdam, which is a study for an allegorical altar-piece, depicting Christ treading the wine-press, from which the sacramental wine is drawn and administered to two donors (FRIEDLÄNDER, *ibid.* XXX, 1908, pp. 49-51); a manuscript of the fifteenth century, containing twelve copper engravings of the Passion, by a German master (SPRINGER, *ibid.* pp. 80-82). The section of Italian Bronzes has received: a Fleeting Youth by Francesco da Sant' Agata; a Girl playing the Flute, of unknown authorship; a bell decorated with putti and floral ornaments, of the early sixteenth century; a mortar of the same period, also decorated with putti and showing the influence of Donatello; a quadrangular plaque, representing putti making wine, by some pupil of Donatello's; a plaque with a figure of David, assigned to Verrocchio; a St. Jerome (plaque) by Ulocrino; a three-sided inkstand by Riccio (W. Bode, *ibid.* XXIX, 1908, pp. 221-227 and 249-252). The Picture Gallery has added to Masaccio's Pisan altar-piece the third portion, which it still lacked. It is a panel containing scenes from the lives of Sts. Julian and Nicholas, and is probably the work of the master's assistant, Andrea di Giusto (D. F. von HADELN, *ibid.* XXX, 1908, pp. 9-11). Andrea di Giusto and this fragment form the subject of a more detailed study by von HADELN in *Monatshefte f. Kunstwiss.* I, 1908, pp. 785-789. *Ibid.* pp. 798-800, J. SPRINGER describes three acquisitions of the Kupferstichkabinett, viz.: a St. Jerome; a Portrait of Christ by Daniel Hofer, engraved after the *vera ikon* of a gem presented by Bajazet II to Innocent VIII; and a design for an altar-piece representing the Madonna, surrounded by medallions with scenes from the life of Christ, by the Flemish master S, dated 1507 (the earliest date hitherto known for this engraver).

Other additions to the Picture Gallery are: a St. Peter healing the Cripple, of the Sienese school of the fifteenth century; a Flagellation and a Pieta by Ugolino da Siena, belonging to an altar-piece, of which the museum already possessed a panel; a Madonna by Turino Vanni; a Crucifix by Giovanni di Paolo; an altar-piece of which the central part (three saints) is by Bernardo Daddi, the predella by Bicci di Lorenzo; a Portrait of a Man by Tintoretto; the Garden of Amida, sketched by Tiepolo; a Coronation of the Virgin by Michelino da Besozzo; a Crucifixion by Conrad Witz; a Portrait of a Woman by Roger van der Weyden; various pictures by Geertgen van Saint Jans, Bosch, Rembrandt, the Dutch school of the seventeenth century, and the English painters of the eighteenth. Among the new pieces of sculpture is a polychrome wooden Calvary of the Lombard school of about 1500. (C. SCHUBRING in *Rass. d' Arte*, VIII, 1908, pp. 180-181.)

MAINZ. — **Roman and Christian Inscriptions.** — Ten of the most important of the inscriptions recently discovered on the site of the former church of St. Alban are published by KÖRBER in *Römisch-Germanisches Korrespondenzblatt*, I, 1908, pp. 77-80. They range in date from the first to the eighth century. Especially noteworthy are the personal name *Forand*, apparently the participle of *fōran*, and *transitum* in the sense of "death," in an inscription of the fifth or sixth century; *benemerorius*, equivalent to *bonae memoriae*, and with a ligature of *i* and *u*, seventh century; and *carus* with the genitive case, last half of the eighth century, a construction not found in the *Thes. Ling. Lat.* Other similar inscriptions are published by Körber, *ibid.* pp. 54-57.

REGENSBURG. — **A Portrait of Altdorfer.** — H. HILDEBRANDT has discovered a portrait of Altdorfer in a miniature which decorates the first page of the Freedom-Book of Regensburg. The miniature represents the presentation of the book in solemn session of the Council. The councillors are grouped to the left and in the background on benches which meet at right angles, and the arms of each are worked into a border for the composition. The coat-of-arms labelled *Albrecht Altdorfer* corresponds to a beardless man, with broad energetic head, and straight nose, a peculiar contrast to the unauthentic bearded portrait given us by a woodcut of Kilian. To the right on the wall of the room hangs a painting of Christ enthroned, with Mary and John kneeling at either side, which Hildebrandt regards as a reproduction of one of Altdorfer's own pictures. He believes the miniature to be the work of Hans Muelich. (*Rep. f. K.* XXXI, 1908, pp. 456-462.)

SEITSCHEN. — **A Little-known Gallery.** — An article by H. NAUMANN in *Z. Bild. K. N. F.* XX, 1908, pp. 1-15, acquaints us with the paintings preserved in the gallery of Schloss Gaussig, the castle of the Schall-Riancour family. The collection was probably formed in the seventeenth century. The most important works are: Christ at the Column signed by Mabuse and dated 1527; the Operation on the Foot of a Satyr by Barthel Spranger; an Adoration of the Magi by Jan Brueghel the Elder, after the lost original by his father Pieter (this makes the eleventh of the known copies); a Portrait of his Mother by Rembrandt; a Portrait of a Lady with a Pearl Necklace of the same artist's school; a Tavern Scene by Isaak van Ostade; a Horseman in a Landscape by Aalbert Cuypp; the Angry

Captain by Jacob Duck; a Portrait of a Gentleman, with the two carnations in the manner of Holbein the Younger; and the Portrait of a Bourgeoise by a master of the lower Rhenish school.

AUSTRIA-HUNGARY

BUDA-PESTH.—**Acquisitions of the Museum.**—The Museum at Buda-Pesth has recently acquired: a Deposition by Pedro Sanchez; an Annunciation by El Greco; and the Portrait of Doña Cean Bermudez by Goya (*Monatshefte f. Kunstwiss.* I, 1908, p. 666). From the Mühlheim collection, the museum has bought a Christ and the Samaritan Woman by Annibale Carracci; a portrait of a boy, perhaps Charles II of Spain, by Juan Carreño de Miranda; a sixteenth century portrait by a French master; a Head of an Old Man by Rubens; and a number of other pictures, chiefly by Dutch masters of the seventeenth century (Z. V. TAKACS, *ibid.* pp. 1026-1027). The Spanish paintings in the gallery are described by A. L. MAYER, *ibid.* pp. 517-522, who characterizes the gallery as possessing the richest collection of Spanish paintings outside of Spain. From Langton Douglas the museum has acquired a youthful work of Velasquez representing an old man, a youth, and a serving-maid who pours out wine for the pair (*ibid.* pp. 917-922).

GRADO.—**A Sixth Century Mosaic.**—Two and one half metres below the floor of the church of S. Maria delle Grazie at Grado, H. Swoboda and W. Wilberg have found a sixth century mosaic with the monogram of the patriarch Elias. An ancient grave has also been found in the church. Further investigations will be made. (*Jh. Oest. Arch.* I, XI, 1908, Beiblatt, col. 9.)

KLAPAVICA.—**Recent Excavations.**—Recent excavations at Klapavica have brought to light remains of a church of the sixth century, inscriptions of the first century A.D., and Croatian graves of the ninth and tenth centuries. (*Jh. Oest. Arch.* I, XI, 1908, Beiblatt, col. 5.)

SALONA.—**Christian Inscriptions.**—In *Jh. Oest. Arch.* I, X, 1908, Beiblatt, cols. 77-100 (7 figs.), H. DELEHAYE gives an account of the Christian inscriptions found by Mgr. Bulić at Salona. These are of importance for establishing the names and dates of the following bishops of Salona: Domnio, Venantius, Primus, Gaianus, Symferius, Hesychius, Justinus, and Maximus. Light is also thrown upon Saints Domnio, Anastasius, Menas, Felix of Epetium, and Caius by Mgr. Bulić's excavations.

VIENNA.—**Acquisitions of the Austrian Museum.**—The Austrian Museum has recently acquired the tapestries of the convent of Goess, near Leoben. They date from the foundation of the convent, about 1000. The most important piece is the *Antependium*, upon which occurs what is said to be the most ancient mention of the names of the Magi; Melchior, Balhasar, and Caspar. (*Burl. Mag.* XIII, 1908, p. 241.)

RUSSIA

CRIMEA.—**Recent Discovery of Gothic Graves.**—Baron J. DE BAYE gives an account of the recent discovery of Gothic graves in the Crimea in *M. Soc. Ant. Fr.* LXVII, 1907, pp. 72-114 (3 pls.; 20 figs.). At **Kertsch** the graves date from the fourth and fifth centuries A.D., as numer-

ous coins and votive cups of silver with the head of Constantius prove. Weapons and jewellery were found in abundance. The swords are like those of the Merovingian Franks, but longer and often have their handles incrustated with garnets. The shields are round, and consist of a wooden frame covered with leather and having an iron boss in the centre. The handle extends from one side of the boss to the other. The lances are identical with those found in central and western Europe. The jewellery consists of fibulae and other objects made of garnets and bits of colored glass set in gold. The technique seems to have originated in the Orient, and to have been adopted by the Goths, who carried it in their wanderings to the west, where it was imitated by other barbarous peoples. Excavations were also carried on, chiefly in 1903-1905, by N. Repnikoff in the vicinity of Gourzouf. At **Sououk-Sou** ninety-three tombs were opened, and eleven others at **Balgota**. They date from three different periods. The oldest and richest were cut in the rock and contained skeletons covered by planks of wood. The oldest of them probably dates from the fifth century A.D. The tombs of the second period are similar; but are covered with slabs of stone or tiles. Both are Gothic. Those of the third period, which are the latest and poorest, are built of large stones. They are Byzantine and date from the ninth and tenth centuries. The Gothic tombs are similar to those of the Franks or Burgundians in western Europe, although there are some differences. No arms were found, but many pieces of jewellery. The earrings, consisting of a gold ring with pendant attached, date from the fifth and sixth centuries. Fibulae with projecting rays, and others of an elongated type, are similar to forms found in western Europe. The tombs are important for the light they throw on the invasion of the barbarians, and for the date they give for the origin of a type of art.

GREAT BRITAIN

BRANT BROUGHTON.—**A New Masaccio.**—B. BERENSON publishes in *Rass. d'Arte*, VIII, 1908, pp. 81-85, a Madonna with Music-making Angels, formerly attributed to Gentile da Fabriano, which he ascribes to Masaccio, and identifies as the principal panel of the altar-piece which Vasari describes as painted by Masaccio for the church of the Carmine at Pisa. Around this picture he groups a number of others, some of them new attributions, and on the basis of the date 1426, which is assured to the Pisan painting by recently discovered documentary evidence, the writer rearranges the last work of Masaccio so as to bring the execution of the birth-plate at Berlin, the Trinity of S. Maria Novella, and the Brancacci frescoes within the last eighteen months of Masaccio's life.

FIVEHEAD.—**A Palimpsest Brass.**—In *Proc. Soc. Ant.* XXI, 1907, pp. 334-338 (2 figs.), E. H. BATES describes an interesting palimpsest brass recently found at Fivehead, Somerset. The obverse represents Jane, wife of Lord Edward Seymour, and dates from 1565. It is made up of three pieces taken from older brasses, one of which bears on the reverse the date 1428.

IPSWICH.—**An Anglo-Saxon Cemetery.**—In *Archaeologia*, LX, 1907, pp. 325-352 (3 pls.; 14 figs.), NINA F. LAYARD describes an Anglo-Saxon cemetery recently discovered at Ipswich, in which 159 graves have been opened and examined. The numerous objects discovered, beads,

buckles, fibulae, spear-heads, etc., are now in the museum at Ipswich. They are discussed by R. A. SMITH in *Proc. Soc. Ant.* XXI, 1907, pp. 242-247 (2 pls.; 2 figs.).

LONDON.—**Acquisitions of the National Gallery.**—Lord Talbot's large Family Group by Franz Hals has entered the National Gallery at the price of \$125,000. (K. FRIESE in *Monatshefte f. Kunstwiss.* I, 1908, pp. 917-922.) The same gallery has received by legacy of Martin Colnaghi the Madonna and Saints by Lorenzo Lotto, the Bohemians by Wouwerman, a landscape by Gainsborough, and Twilight by A. van der Neer. At the death of Colnaghi's widow, the sum of \$400,000 will be transferred to the gallery as a purchase fund (*ibid.* pp. 808-809). Other acquisitions are: a number of Dutch and Flemish works of the sixteenth century, some modern French paintings, and a Madonna by Giovanni Francesco da Rimini, dated 1406 (*ibid.* p. 459).

A Byzantine Panel.—O. M. DALTON contributes to *Burl. Mag.* XIII, 1908, pp. 230-236, a description of an interesting Byzantine panel in the British Museum, which contains four scenes: the Annunciation, Nativity, Baptism, and Transfiguration. The writer assigns it to the twelfth or thirteenth century.

A Viking Bit.—In *Proc. Soc. Ant.* XXI, 1907, pp. 401-402 (fig.), F. G. H. PRICE publishes an iron Viking bit found near Cheapside in 1906.

RICHMOND.—**A Portrait by Holbein the Elder.**—The Portrait of a Woman in the collection of Sir Frederick Cook has hitherto been ascribed to the younger Holbein, but is now proved by the discovery of the sketch for the picture, by the hand of the elder painter, to be his work. This sketch is in the British Museum and closely resembles another in the museum at Berlin. (C. DOUGSON, *Burl. Mag.* XIV, 1908, pp. 37-43.)

STANLEY.—**The Cistercian Abbey.**—In *Archaeologia*, LX, 1907, pp. 493-516 (plan; 2 pls.; 9 figs.), H. BRAKSPEAR describes the Cistercian Abbey at Stanley in the light of his recent excavations. It was built in 1204 and torn down about 1536, and although no part of it remains above ground, the position of the principal buildings has always been known. These are now described in detail.

YORK.—**A Sculptured Representation of Hell Caldron.**—In *Proc. Soc. Ant.* XXI, 1907, pp. 248-260 (pl.), J. BILSON describes in detail a sculptured stone found at York in 1904 representing Hell Caldron. It probably dates from the last quarter of the twelfth century.

AFRICA

AÏN-CHERCHOUGH.—**Christian Epitaphs.**—In *B. Soc. Ant. Fr.* 1908, pp. 100-102, A. MERLIN publishes three early Christian epitaphs in Latin copied by Captain Nicolas at Aïn-Cherchouch, 12 km. north of Mdeina in Tunis.

ALGERIA.—**Mohammedan Ruins.**—*Monatshefte f. Kunstwiss.*, I, 1908, pp. 1013-1016, contains a description by E. KÜHNEL of the ruins of the Qal'a, the capital of the Berber kingdom founded by Ibn Hanumad in the eleventh century. The importance of these ruins for the history of art lies in the fact that they are the first unequivocal monuments of Syro-Mesopotamian influence in Algeria.

DOUGGA.—**A Christian Basilica.**—In Director POINSSOT's report

of the excavations from February to June, the discovery is recorded of a Christian basilica. It has three doors, and is three-aisled. The presbyterium is raised and access given to it by two stairways of four steps each. Below this is a crypt containing sarcophagi. The apse is turned toward the west instead of the east. (*B. Arch. C.T.* July, 1908, p. 8.)

MDEINA.—**Christian Epitaphs.**—In *B. Soc. Ant. Fr.*, 1908, pp. 131-133, A. MERLIN publishes two Christian inscriptions in Latin copied by Captain Nicolas at Mdeina, the ancient Althiburus in Tunis.

THABRACA.—**A Curious Mosaic.**—A Mosaic ornamenting a Christian stele has been discovered in Thabraca in Tunis, and is illustrated by O. MARUCCHI in *N. Bull. Arch. Crist.* 1908, pp. 150-152 (first published by Gauckler, *Mon. Piot.* Vol. XIII). It represents the interior of a Christian church in vertical and longitudinal sections, with tribune, apse, and altar, the last-named having three burning tapers upon it. An inscription above the colonnade reads: ECCLESIA MATER VALENTIA IN PACAE.

THAMALLULA.—**Inscribed Capitals.**—In the excavations in the Christian chapel of Thamallula in Algeria, capitals were found inscribed, in letters which do not seem to be earlier than the Byzantine period, with quotations from the Psalms. (*Gsell, B. Arch. C. T.*, 1908, June, pp. 9-10.)

TIMGAD.—**A Byzantine Mosaic.**—A mosaic representing Venus Anadyomene attended by a Triton and a Nereid has been discovered at Timgad. It measures three to five metres in length and is in excellent condition. (*R. A. MEYER in Monatshefte f. Kunstwiss.* I, 1908, pp. 457-458.)

UNITED STATES

BOSTON.—**Acquisitions of the Museum of Fine Arts.**—The Museum of Fine Arts has recently acquired: a Madonna and Saints by Sano di Pietro, from the Nevin collection; a grave-relief from the tomb of the abess of St. Patrizia in Naples (*B. Mus. F. A.* 1908, pp. 21-22); and a collection of Persian pottery (*ibid.* pp. 29-32).

CHICAGO.—**A Madonna by Bartolomeo Vivarini.**—A Madonna by Bartolomeo Vivarini is published by F. M. PERKINS in *Rass. d'Arte*, VIII, 1908, p. 145. It comes from a private collection in Italy and is now in the Ellis collection at Chicago.

NEW YORK.—**Acquisitions of the Metropolitan Museum.**—Recent additions to the Museum are: an early fifteenth century Florentine cassone front representing the Capture of Salerno by Robert Guiscard (described by W. RANKIN in *Burl. Mag.* XIII, 1908, p. 382); a bronze bust of Innocent X, attributed to Alessandro Algardi; two painted and lacquered doors from the Palace of the Forty Columns, in Ispahan (reign of Shah Abbas, 1587-1628); a tabernacle of the Muranese School (*B. Metr. Mus.* 1908, pp. 71-72); a Portrait of a Man by Lucas Cranach the Elder; two stained-glass windows of about 1500 (German School, *ibid.* pp. 87-88 and 92); a Madonna by Pietro di Domenico (*ibid.* pp. 117-119); the Entombment from the Château de Biron, loaned by Mr. Morgan (*ibid.* pp. 134-140); a cassone front with scenes from the life of Nebuchadnezzar (Umbrian, circa 1500, *ibid.* p. 191); a bronze statuette of Adam, of the Venetian or Paduan school, fifteenth century; two others of saints, of the school of Michelangelo; and five plaques of North Italian origin, attributed to Moderno, Valerio Belli, and a pupil of Jacopo Sansovino (*ibid.* pp. 229-231).

A Limoges Enamel in the Kann Collection. — A Limoges enamel in the Kann collection, remarkable for the brutality of its types, represents Christ before Pilate, and belongs to the second half of the fifteenth century. It is attributed by J. J. MARQUET DE VASSELLOT in *Burl. Mag.* XIV, 1908, pp. 30-34, to Monvaerni, the author of a plaque of the Flagellation in the Dutnit collection in the Petit Palais, Paris, and other enamels.

PHILADELPHIA. — Paintings by Vittorio Crivelli. — F. MASON PERKINS publishes in *Rass. d'Arte*, VIII, 1908, p. 120, a S. Antonio which was formerly in the Nevin collection at Rome, and a triptych representing The Madonna and Saints, both of which he assigns to Vittorio Crivelli. These pictures are now in the collection of Mr. Wilstack of Philadelphia.

AMERICAN ARCHAEOLOGY GENERAL AND MISCELLANEOUS

EXPLORATIONS IN NORTHEASTERN WYOMING. — On an archaeological reconnaissance of northeastern Wyoming, made during July and August, 1908, for the American Museum of Natural History, Harlan I. Smith examined the country by wagon from Lusk north to Newcastle in the Black Hills, west to Sheridan and the Big Horn Mountains, and south to Casper. A prehistoric quarry covering about five acres was found near the junction of Hat Creek and Old Woman Creek in eastern Wyoming, a large rock shelter containing promising debris and petroglyphs, also small caves and petroglyphs in Oil Creek Cañon, about six miles west of Newcastle, pictographs in black and red, and petroglyphs in a large rock shelter in the Big Horns about fourteen miles southwest of Buffalo and numerous tipircircles indicated by stones in eastern Wyoming.

VIENNA. — The International Congress of Americanists. — At the International Congress of Americanists held in Vienna from Sept. 9 to Sept. 14, 1908, the following papers of special archaeological interest were presented. Franz Boas, New York, (Opening Address) "The Results of the Jesup Expedition." The writer emphasized as possible a connection between the northeastern Asiatic and the northwestern American peoples resulting from a preglacial immigration into America and a counter-migration towards Siberia. Adela C. Breton, England, exhibited a copy of an ancient plan, supposed to be part of a plan of Tenochtitlan. Sir Clements Markham, London: "Ancient Peruvian Carvings at Tiahuanaco and Chavin." Edward Seler, Berlin: "Ruins of Chichen-Itza." He also discussed the old Mexican feather-ornament in the Natural History Museum in Vienna. L. Capitan, Paris: "Comparisons of Archaeological Objects from America with similar Forms from other Parts of the World: Breast-rings, 'Entrelacs,' etc." M. H. Saville, New York, gave an account of his recent work and explorations on the coast of Esmeraldas, Ecuador. George Grant MacCurdy, New Haven, "The Alligator in the Ancient Art of Chiriqui." Juan B. Ambrosetti, Buenos Aires, "The Calchaqui Question." Max Uhle, Lima, "The Shell Heaps of Peru," and other archaeological papers on Peru. Enrico Giglioli, Florence, discussed archaeological objects from the Antilles and from Venezuela. Julius Nestler, Prague, "The Ruins at Tiahuanaco, Bolivia." Charles Peabody, Cambridge, "Recent American Cave-work." C. V. Hartman, Stockholm, "Costa-Rican Archaeology."

ABBREVIATIONS

Abh.: Abhandlungen. *Allg. Ztg.*: Münchener Allgemeine Zeitung. *Alt. Or.*: Der alte Orient. *Am. Ant.*: American Antiquarian. *Am. Anthr.*: American Anthropologist. *Am. Arch.*: American Architect. *A.J.A.*: American Journal of Archaeology. *A.J. Num.*: American Journal of Numismatics. *A. J. Sem. Lang.*: American Journal of Semitic Languages and Literature. *Am. d. Mon.*: Ami des Monuments. *Ant. Denk.*: Antike Denkmäler. *Anz. Schw. Alt.*: Anzeiger für Schweizerische Altertumskunde. *Arch. Ael.*: Archaeologia Aeliana. *Arch. Anz.*: Archäologischer Anzeiger. *Arch. Rec.*: Architectural Record. *Arch. Rel.*: Archiv für Religionswissenschaft. *Arch. Miss.*: Archives de Missions Scientifiques et Littéraires. *Arch. Stor. Art.*: Archivio Storico dell' Arte. *Arch. Stor. Lomb.*: Archivio Storico Lombardo. *Arch. Stor. Nap.*: Archivio Storico Provinciale Napolitano. *Arch. Stor. Patr.*: Archivio della r. società romana di storia patria. *Athen.*: Athenaeum (of London). *Ath. Mitt.*: Mitteilungen d. k. d. Archäol. Instituts, Athen, Abt.

Beitr. Assy.: Beiträge zur Assyriologie. *Ber. Kunsts.*: Amtliche Berichte aus den Königlichen Kunstsammlungen. *Berl. Akad.*: Preussische Akademie der Wissenschaften zu Berlin. *Berl. Phil. W.*: Berliner Philologische Wochenschrift. *Bibl. Stud.*: Biblische Studien. *Bibl. World*: The Biblical World. *B. Ac. Hist.*: Boletín de la real Academia de la Historia. *Boll. Arte*: Bollettino d' Arte. *Boll. Num.*: Bollettino di Numismatica. *Bonn. Jb.*: Bonner Jahrbücher; Jahrbücher des Vereins von Altertumsfreunden im Rheinlande. *B.S.A.*: Annual of the British School at Athens. *B.S.R.*: Papers of the British School at Rome. *B. Arch. M.*: Bulletin Archéol. du Ministère. *B. Arch. C. T.*: Bulletin Archéologique du Comité des Travaux hist. et scient. *B.C.H.*: Bulletin de Correspondance Hellénique. *B. Hist. Lyon*: Bulletin historique du Diocèse de Lyon. *B. Inst. Ég.*: Bulletin de l'Institut Égyptien (Cairo). *B. Metr. Mus.*: Bulletin of the Metropolitan Museum of Art, New York. *B. Mus. F. A.*: Museum of Fine Arts Bulletin, Boston. *B. Num.*: Bulletin de Numismatique. *B. Soc. Ant. Fr.*: Bulletin de la Société des Antiquaires de France. *B. Soc. Anth.*: Bulletin de la Société d'Anthropologie de Paris. *B. Soc. Yonne*: Bulletin de la Société des Sciences historiques et naturelles de l'Yonne. *B. Mon.*: Bulletin Monumental. *B. Arch. Stor. Dal.*: Bollettino di Archeologia e Storia Dalmata. *B. Com. Rom.*: Bollettino d. Commissione Archeologica Comunale di Roma. *B. Arch. Crist.*: Bollettino di Archeologia Cristiana. *B. Pal. It.*: Bollettino di Paleontologia Italiana. *Burl. Gaz.*: Burlington Gazette. *Burl. Mag.*: Burlington Magazine. *Byz. Z.*: Byzantinische Zeitschrift.

Chron. Arts: Chronique des Arts. *Cl. Phil.*: Classical Philology. *Cl. R.*: Classical Review. *C. R. Acad. Ins.*: Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C.I.A.*: Corpus Inscriptionum Atticarum. *C.I.G.*: Corpus Inscriptionum Graecarum. *C.I.L.*: Corpus Inscriptionum Latinarum. *C.I.S.*: Corpus Inscriptionum Semiticarum.

Ἐφ. Ἀρχ.: Ἐφημερίς Ἀρχαιολογική. *Eph. Ep.*: Ephemeris Epigraphica. *Eph. Sem. Ep.*: Ephemeris für Semitische Epigraphik. *Exp. Times*: The Expository Times.

Fundb. Schwab.: Fundberichte aus Schwaben, herausgegeben vom württembergischen anthropologischen Verein.

Gaz. B.-A.: Gazette des Beaux-Arts. *G.D.I.*: Sammlung der griechischen Dialekt-Inscriptionen.

I.G.: Inscriptiones Graecae (for contents and numbering of volumes, cf. *A.J.A.* IX, 1905, pp. 96-97). *I.G.A.*: Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Arg.*: Inscriptiones Graecae Argolidis. *I. G. Ins.*: Inscriptiones Graecarum Insularum. *I. G. Sept.*: Inscriptiones Graeciae Septentrionalis. *I. G. Sic. It.*: Inscriptiones Graecae Siciliae et Italiae.

Jb. Arch. I.: Jahrbuch d. k. d. Archäol. Instituts. *Jb. Kl. Alt.*: Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik. *Jb. Kunsth. Samml.*: Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses. *Jb. Phil. Päd.*: Neue Jahrbücher für Philologie und Pädagogik (Fleckeisen's Jahrbücher). *Jb. Preuss. Kunsts.*: Jahrbuch d. k. Preuss. Kunstsammlungen. *Jb. Oest. Arch. I.*: Jahreshefte des österreichischen Archäologischen Instituts. *J. Asiat.*: Journal Asiatique. *J.A.O.S.*: Journal of American Oriental Society. *J. Anth. Inst.*: Journal of the Anthropological Institute of Great Britain and Ireland. *J. B. Archäol.*:

Journal of the British Archaeological Association. *J. B. Archit.*: Journal of the Royal Institute of British Architects. *J. Bibl. Lit.*: Journal of Biblical Literature. *J. H. S.*: Journal of Hellenic Studies. *J. Int. Arch. Num.*: *Δελτίον Ἐφημερίς τῆς νομισματικῆς ἀρχαιολογίας*, Journal international d'archéologie numismatique (Athens). *J. T. Vict. Inst.*: Journal of Transactions of the Victoria Institute.

Kb. Gesamtver.: Korrespondenzblatt des Gesamtvereins der deutschen Geschichts- und Altertumsvereine. *Kb. Wd. Z. Ges. K.*: Korrespondenzblatt der Westdeutschen Zeitschrift für Geschichte und Kunst. *Klio*: Klio: Beiträge zur alten Geschichte. *Kunstchr.*: Kunstchronik.

Mél. Arch. Hist.: Mélanges d'Archéologie et d'Histoire (of French School in Rome). *Mél. Fac. Or.*: Mélanges de la Faculté Orientale, Beirut. *M. Acc. Modena*: Memorie della Regia Accademia di scienze, lettere ed arti in Modena.

M. Inst. Gen.: Mémoires de l'Institut Genevois. *M. Soc. Ant. Fr.*: Mémoires de la Société des Antiquaires de France. *Mitt. Anth. Ges.*: Mitteilungen der anthropologischen Gesellschaft in Wien. *Mitt. C.-Comm.*: Mitteilungen der königlich-kaiserlichen Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmale. *Mitt. Or. Ges.*: Mitteilungen der deutschen Orient-Gesellschaft. *Mitt. Pal. V.*: Mitteilungen und Nachrichten des deutschen Palestina Vereins. *Mitt. Nassau*: Mitteilungen des Vereins für nassauische Altertumskunde und Geschichtsforschung. *Mitt. Vorderas. Ges.*: Mitteilungen der vorderasiatischen Gesellschaft. *Mon. Ant.*: Monumenti Antichi (of Accad. d. Lincei). *Mon. Piot*: Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. (Fondation Piot). *Mün. Akad.*: Königlich Bayerische Akademie der Wissenschaften, München. *Mün. Jb. Bild. K.*: Münchner Jahrbuch der bildenden Kunst.

N. D. Alt.: Nachrichten über deutsche Altertumsfunde. *Not. Scav.*: Notizie degli Scavi di Antichità. *Num. Chron.*: Numismatic Chronicle. *Num. Z.*: Numismatische Zeitschrift. *N. Arch. Ven.*: Nuovo Archivio Veneto. *N. Bull. Arch. Crist.*: Nuova Bullettino di Archeologia cristiana.

Or. Lit.: Orientalistische Literaturzeitung. *Or. Lux*: Ex. Oriente Lux. *Pal. Ex. Fund.*: Quarterly Statement of the Palestine Exploration Fund. *Πρακτικά*: *Πρακτικά τῆς ἐν Αθήναις ἀρχαιολογικῆς ἐταιρείας*. *Proc. Soc. Ant.*: Proceedings of the Society of Antiquaries.

Rass. d'Arte: Rassegna d'Arte. *Rec. Past*: Records of the Past. *R. Tr. Ég. Assyr.*: Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes. *Reliq.*: Reliquary and Illustrated Archaeologist. *Rend. Acc. Lincei*: Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.*: Repertorium für Kunstwissenschaft. *R. Assoc. Barc.*: Revista de la Asociación artístico-arqueológico Barcelonesa. *R. Arch. Bibl. Mus.*: Revista di Archivi, Biblioteche, y Museos. *R. Arch.*: Revue Archéologique. *R. Art Anc. Mod.*: Revue de l'Art ancien et moderne. *R. Art Chrét.*: Revue de l'Art Chrétien. *R. Belge Num.*: Revue Belge de Numismatique. *R. Bibl.*: Revue Biblique Internationale. *R. Ép.*: Revue Épigraphique. *R. Ét. Anc.*: Revue des Études Anciennes. *R. Ét. Gr.*: Revue des Études Grecques. *R. Ét. J.*: Revue des Études Juives. *R. Hist. Rel.*: Revue de l'Histoire des Religions. *R. Num.*: Revue Numismatique. *R. Or. Lat.*: Revue de l'Orient Latin. *R. Sém.*: Revue Sémitique. *R. Suisse Num.*: Revue Suisse de Numismatique. *Rh. Mus.*: Rheinisches Museum für Philologie, Neue Folge. *R. Abruzz.*: Rivista Abruzzese di Scienze, Lettere ed Arte. *R. Ital. Num.*: Rivista Italiana Numismatica. *R. Stor. Ant.*: Rivista di Storia Antica. *R. Stor. Calab.*: Rivista Storica Calabrese. *R. Stor. Ital.*: Rivista Storica Italiana. *Röm.-Germ. Forsch.*: Bericht über die Fortschritte der Römisch-Germanischen Forschung. *Röm. Mitt.*: Mitteilungen d. k. d. Archäol. Instituts, Röm. Abt. *Röm. Quart.*: Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte. *Sächs. Ges.*: Sächsische Gesellschaft (Leipsic). *Sitzb.*: Sitzungsberichte. *S. Bibl. Arch.*: Society of Biblical Archaeology, Proceedings. *Voss. Ztg.*: Vossische Zeitung. *W. kl. Phil.*: Wochenschrift für klassische Philologie. *Z. D. Pal. V.*: Zeitschrift des Deutschen Palestina Vereins. *Z. Aeg. Sp. Alt.*: Zeitschrift für Aegyptische Sprache und Altertumskunde. *Z. Alttest. Wiss.*: Zeitschrift für alttestamentliche Wissenschaft. *Z. Assyr.*: Zeitschrift für Assyriologie. *Z. Bild. K.*: Zeitschrift für Bildende Kunst. *Z. Ethn.*: Zeitschrift für Ethnologie. *Z. Morgenl.*: Wiener Zeitschrift für die Kunde des Morgenlands. *Z. Morgenl. Ges.*: Zeitschrift der deutschen Morgenländischen Gesellschaft. *Z. Mün. Alt.*: Zeitschrift des Münchener Altertumsvereins. *Z. Num.*: Zeitschrift für Numismatik.

AN INSCRIPTION OF THE *LABICANI*
QUINTANENSES

THE inscriptions here reproduced are cut upon a large marble base 1.30 m. high, 0.60 m. wide, and 0.58 m. thick, now in the small municipal museum of Frascati (Fig. 1). The base was discovered in 1899 in the Vigna Moretti below the hill of La Colonna near the fifteenth milestone on the Via Labicana. Imperfect copies of the inscriptions, which are difficult to read, were published by Tomassetti and Ashby, with a discussion of their topographical importance.¹

The difficulty of deciphering these inscriptions results from their partial erasure in antiquity. The marble base was used first in 196 A.D., probably to support an honorary statue, and an inscription recording the name of the person thus honored, the names of the individuals charged with the erection, and the fact that the space for its location was voted *decurionum decreto* was placed on the front of the base, and on the left side the date of the dedication with the names of two *quattuorviri*. About a hundred years later the inscription on the front was almost entirely erased, leaving traces of the words in the last



FIGURE 1. — MARBLE BASE AT
FRASCATI.

¹ Tomassetti, *B. Com. Rom.* 1899, pp. 280-293, *Not. Scav.* 1900, p. 51; Ashby, *Papers of the British School at Rome*, I (1902), pp. 257, 258, and Map V. *American Journal of Archaeology*, Second Series. *Journal of the Archaeological Institute of America*, Vol. XIII (1909), No. 2.

six lines only, and a second inscription, in honor of the emperor Maximianus (285-305 A.D.), was cut upon the upper two-thirds of the space. Tomassetti believed that at this time the base was partially or wholly cemented in a wall, leaving only the front visible. This may account for the preservation of a portion of the inscription on the left side. Finally, in consequence of the *damnatio memoriae* of Maximianus, the second inscription on the front of the base was in turn erased and made almost illegible.

At Professor Dessau's request I made a new examination of the stone in the hope of securing, if possible, a more nearly complete reading of all three inscriptions. By means of squeezes and other devices I succeeded in making out the imperial titulus, the dedication on the left side, and the last three lines (ll. 14-16) of the first inscription with fragments of ll. 11-13.

To take each up in order, the only portion of the first erased inscription which I was able to read is the following:

Traces of letters only in ll. 1-10.

STITVIT IN
SCRIPTA T O
STATVAM N
CVRLTITEDIOLFFABPROCV O
15 PATREETLTITEDIOLFFAB PROCVLO
FRATRE. L.D.D.D.

... stituit in-scripta [aere colla]to | statuam
.. [censueru]nt |, cur(antibus) L. Titedio L. f. Fab. Procu[lin]o |
patre et L. Titedio L. f. Fab. Proculo | fratre. L(ocus) d(atu)s
d(ecurionum) d(ecreto).

In ll. 11-13 the letters are $2\frac{1}{2}$ cm. high, in the remaining lines, $3\frac{1}{2}$ cm. The restorations in ll. 12, 13, 14 are based upon well-defined traces of letters. The phrase *l(ocus) d(atu)s d(ecurionum) d(ecreto)* occurs in dedicatory, honorary, and sepulchral inscriptions; if, moreover, the spot where the base was discovered is rightly identified as the forum of the Labicani Quintanenses (see below), this inscription may record the erection of an honorary statue to some distinguished citizen of the town. The nomen *Titedius*, although not common, occurs

several times in the inscriptions of Central Italy. One (*C.I.L.* VI, 33029) of unknown provenience preserves this name belonging to a man who was *IIII vir iur. dic. quin.*; another (*C.I.L.* X, 5405) records that a *C. Titedius* was *quattuorvir* at Interamnae (?).

The dedication on the left side of the base, which belongs with the earlier inscription on the front, I read as follows:

K · IVNIS
 [REDACTED] DEXTRO · II · C^{os} June 1, 196 A.D.
 [REDACTED] TRASEA · PRISC^o
 [REDACTED] MNESTHERAE ·
 [REDACTED] SYNCHÆERONT^e
 IIII · VIR

[*Ded(icatum)*] *K(alendis) Iunis* | *Dextro II c[os.]* |
Trasea Prisc[o] | *Mnestherae* | *Synchaeront[e]* | *IIII*
vir(is).

The letters are about 2 cm. high and are so shallow that it is only after long scrutiny that the words can be made out. Cuttings or depressions on the stone before ll. 2-5 may be the remains of chiselled letters no longer legible; at any rate, I assume the existence in each of these lines of a praenomen and nomen, first, because the use of the cognomen alone for the *quattuorviri* would be quite irregular; and also because otherwise the words of the last line would not be placed symmetrically with reference to the other lines. The names in full of the consuls for 196 A.D. are C. Domitius Dexter and L. Valerius Messalla Thrasea Priscus (*C.I.L.* X, 1786). The reading, IVRED, which Tomassetti restores in the last line, seems to me very uncertain.

Quite unusual is the placing of *cos.* after the name of the consul first mentioned. *Mnestherae* is, of course, for *Mnestere* (abl.). The cognomen *Synchaeron* is rare; at any rate, I do not know of its occurrence in any Latin inscription. *Συνχαίρων* appears in a Greek sepulchral inscription of the Roman period (Kaibel, *Inscr. Gr. Ital. et Sicil.* 1473).

The text of the later imperial inscription is as follows:

·IMP·C·M·VALERIO·
 ·MAXIMIANO·PIO·
 ·FELICI·
 INBICTO·AVG·
 ORDO LABICAN
 ·Q·Q·
 ·D·N·M·Q·EIVS·

*Imp. C(aesari) M. Valerio | Maximiano pio | felici | inbicto Aug
 (usto) | ordo Labican(orum) | Q(uintanensium) | d(omino) n(ostro)
 m(aiestati)q(ue) eius.*

The letters of ll. 1-5 are 3 cm. high, of ll. 6, 7, about 4 cm. The letters of ll. 2, 3, and 4 are difficult to make out; l. 2 especially is almost illegible. In the last line the use of drill points to accentuate the letters is still plainly seen. Traces of letters belonging to the first inscription appear frequently; for example, L at the beginning of the first line, A after P in l. 1, and RP before D in l. 7, but they are insufficient to permit the restoration of any word. The abbreviation C. for *Caesar* occurs in two inscriptions of Diocletian and Maximianus, *C.I.L.* IX, 6064 (= X, 6969), found at Melfi in Apulia on the ancient Via Herculia, and *C.I.L.* X, 6975, from Marsico Nuovo in Lucania, also on the Via Herculia. But this abbreviation appears as early as 139 A.D. (*C.I.L.* IX, 2828). Noteworthy in our inscription is the omission of the name Aurelius in the title of the emperor. The inscription must be as late at least as 286 A.D., in which year Maximianus received the title of Augustus.

The place of discovery of the inscription and the reading of another (*C.I.L.* XIV, 2770), quoted below, in which the words *Rei publicae Lavicanorum Quintanensium* appear, leave no doubt that the abbreviation Q·Q in l. 6 means *Quintanensium*. If, then, as Tomassetti assumes, the discovery near our base of blocks of *sperone*, slabs of marble, cornices, and other architectural fragments indicates the existence of a public square or forum, the topographical importance of ll. 6, 7 is considerable, since we may recognize in the place the site of the post-station,

Ad Quintanas,¹ whose inhabitants were called Lab(v)icani Quintanenses, and whose location is placed by the Itineraries fifteen miles from Rome on the Via Labicana. Dessau (*C.I.L.* XIV, p. 275) suggests that the town was called Quintanae, this name being derived possibly from the name of a large estate in which the station was first established. The name is attested also by the sepulchral inscription of unknown provenience, now cemented in the north front of the Casale Ciuffa (a little more than seven hundred yards west of the spot where our inscription was found), *D. M. Parthenio arcario rei publicae Lavicanorum Quintanensium* (*C.I.L.* XIV, 2770); and by the brick-stamp, EX · PREDIS QUINTANENSIB AGATHYRS · AVG · LIB² (*C.I.L.* XV, 462 c = XIV, 4090, 14), found "inter Montecompatri et La Colonna," which shows the existence of a *praedia Quintanensia*.³ Ad Quintanas was probably not on the site of the ancient Labicum, which, according to Strabo (V, p. 237), occupied a lofty elevation 120 stadia, or fifteen miles, from Rome on the right (going toward the south) of the Via Labicana. The discussion of the exact location of Labicum has been a long one, but topographers are now generally agreed that it was on or near the hill of Monte Compatri.⁴ In imperial times, then, the town on the hill lost its importance, and the municipal centre was transferred to a point lower down.

WALTER DENNISON.

¹ *Ordo* (= *decuriones*) is occasionally found, as in our inscription, with the genitive of the municipes, e.g. *ordo Baulanorum*, *C.I.L.* X, 1746, *ordo Cereatinorum Marianorum*, *C.I.L.* X, 5781.

² The corrected text of Dressel.

³ Cf. also *C.I.L.* XV, pp. 8, 131 ff., and *Eph. Epig.* V, p. 256, footnote 1.

⁴ Dessau, *l.c.*; Nissen, *Ital. Landeskunde*, II, 601; Ashby, *l.c.*

AGE AND ANCIENT HOME OF THE BIBLICAL
MANUSCRIPTS IN THE FREER COLLECTION

[PLATES I-III]

THE brevity and haste of my first report on these Mss. have brought some misunderstandings, a few of which I shall try to remove.

The Deuteronomy Ms. has one late marginal note on p. 35: $\text{¶ εἰς τὴν μνημὴν τῶ ἀγῶ πᾶρῶ εἰς τὸ λυχνῆκῶ}$ (to the memory of the holy fathers for the evening time). This is a designation of a regular reading with $\alpha\rho\chi$ and $\tau\epsilon$ showing the beginning and end of the passage (Deut. x. 14–22). Professor Grenfell and Dr. Kenyon agree in dating this cursive note at the end of the sixth or early in the seventh century. Its black ink contrasts strongly with the brown of the text. It seems probable that the note was inserted by a visiting churchman, who marked beforehand the appropriate passage for the day to avoid delay at the time of the services.

An interesting parallel to the hand of the whole Deuteronomy Ms. was found in an unpublished fragment of the Aegyptisches Museum in Berlin (PLATE I). It is numbered P. 6794 and is a double leaf of a parchment book containing Homer, *Il.* 22, 390 ff. The fragment was bought of an Egyptian dealer and has been dated in the fourth or fifth century. The writing is slightly larger than that of the Deuteronomy Ms. (facsimile *A.J.A.* XII, Pl. II). Its cross strokes are slightly heavier, and the M and Ω are sometimes a little broader. The ornamental dots of Ε, C, T, Γ, etc., are a little larger. Y and P have longer tails, K a sharper angle, and Φ is slightly enlarged. The accents and a few breathings are perhaps second hand. It seemed that only every other line was ruled, but as the Ms. was under glass, I could not be certain.

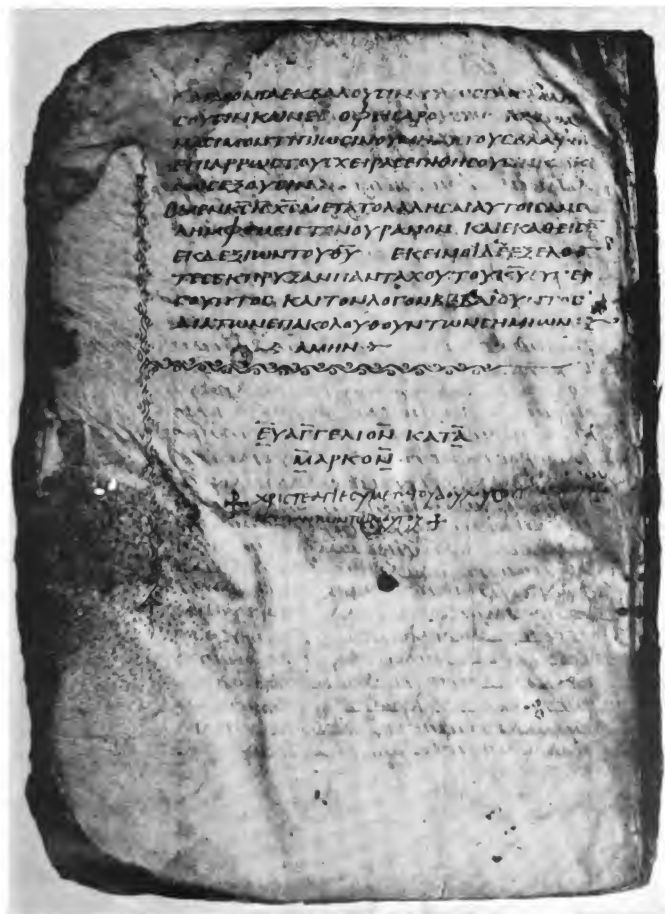


P. 6794. HOMER. ILIAD, XXII, 403 FF.

ЕУΑΓΓΕΛΙΟΝ ΚΑΤΑ ΙΩΑΝΝΗΝ
 ΚΑΤΑ ΙΩΑΝΝΗΝ ΕΝ ΤΩ ΠΡΩΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΔΕΥΤΕΡΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΤΡΙΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΤΕΤΑΡΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΠΕΝΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΕΚΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΕΒΔΟΜΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΟΚΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΕΝΝΕΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΔΕΚΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΕΒΔΟΜΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΟΚΤΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΕΝΝΕΩ ΚΕΦΑΛΑΙΟ
 ΚΑΙ ΕΝ ΤΩ ΔΕΚΩ ΚΕΦΑΛΑΙΟ



GOSPELS MANUSCRIPT. JOHN I, VSS. 1-15



GOSPELS MANUSCRIPT. MARK XVI, Vss. 17-20.

To this hand in turn a near parallel is found in the Codex Ephraemi (facsimile in Omont, *Mss. grecs de la Bib. Nat.* Pl. III), though it must be considered a rather more advanced stage of the writing. Among other slight differences, we may note the size of the Φ , increase in ornamental dots to T, Γ, E, longer tail to P, etc.

Professor Goodspeed (*Bibl. World*, XXXI, 3, 218) has compared with the Deuteronomy Ms. Add. Ms. 17210 of the British Museum (facsimile in *Cat. Anc. Mss. Brit. Mus.*, Greek, Pl. 9), a Homer palimpsest from the Nitrian Desert, not only finding the writing identical, but also that the two agree in ruling only every other line, except at the top of the page. This peculiarity occurs in parts of the Alexandrinus and of a Coptic Ms. in the Freer Collection, as well as in the Frag. Fabianum and some other old Latin Mss. As regards the similarity of writing it is clear that the Homer palimpsest stands closer to Codex Ephraemi and P. 6794 than to the Deuteronomy Ms. It has the same peculiarities in a somewhat higher degree. Also B has the top loop smaller and the bottom flattened, and Δ has the right hand line extended at the top, a heavy dot on the prolongation of the bottom line to the left, but no extension of that line to the right. On the other hand, it shows two forms of the T as in the Deuteronomy Ms. Most of the variations incline toward the hand found in the fragment of Paul's Epistles of the Freer Collection (facsimile *A.J.A.* XII, p. 54, fig. 2). Noteworthy is the tendency to join the top of the T and the bottoms of P and Φ into other letters in both these Mss.

The great similarity of all the above Mss., combined with the distinct development in type of hand from the Deuteronomy Ms. through P. 6794, Codex Ephraemi, and Add. Ms. 17210 to the fragment of Paul's Epistles, makes the conclusion almost unavoidable, that they are products of the same school and century. This conclusion is opposed to the view held by some French and German scholars, that the Codex Ephraemi belongs early in the fifth century and is older than the Alexandrinus. I prefer to place it, as well as its two younger relatives, late in the fifth century, at any rate after the Alexandrinus, the Deuteronomy of the Freer Collection, and the slightly younger

Homer fragment, P. 6794; and I further feel confident that all these represent stages in the development of the same school of writing and are probably from the same region, Lower Egypt.

Add. Ms. 17211 of the Brit. Mus. (facsimile in *Fac. of Bib. Mss. Brit. Mus.*, Pl. III) has also been compared to the Deuteronomy Ms. by Professor Goodspeed. In forms of letters it really stands closer than Add. Ms. 17210, but the hand is larger, irregular, and imitative. It belongs to a period a generation or two later.

In the Gospels Ms. the most interesting discovery is a single quire at the beginning of John, which is in a quite different hand. All of the rest of the Ms. is of the style previously described (cf. PLATE III), and was written by one writer, probably in the fifth century. The writing in the first quire of John looks younger, while the parchment appears much older and more worn (cf. PLATE II).

There are four possible ways of explaining the presence of this strange quire: (1) it was written later to fill out a lost or damaged part; (2) it was taken from an old Ms. for the same purpose; (3) a quire from the parent Ms. was retained and bound in again, because of its good state of preservation; (4) it was written by another copyist at the same time. We may safely dismiss the fourth explanation on the basis of difference in parchment, ruling, etc., and the second because of the likeness and continuity of text with the following quires. For a comparison of our Ms. for eighteen verses in each of the Gospels shows, in opposition to the composite text of Matthew containing a considerable Syrian element, that both parts of John as well as Luke have almost no Syrian and few Western readings, while individual variants are fairly common.

The text of Mark is likewise composite, showing many readings usually designated as Syrian, but even more Western and Pre-syrian in general, as well as many individual variants. On this evidence we must accept the belief that the strange quire in John is a portion of the same Ms. tradition as the rest of that Gospel.

The dirty, greasy, worn condition of the first page of John, quire 1, shows that it was once the outside leaf. This may have been at some time when the volume was out of its bind-

ing, yet no other part of the Ms. has suffered in proportion. The aged appearance alone is not enough to prove that this quire was from the parent Ms. nor does the slight stretching of the text on its last page prove that it was later copied to fill a gap. In ancient Mss. we find not infrequent instances of stretching or crowding at the quire ends so as to agree with the copy. In this Ms. we find more instances of crowding at quire ends. As we dare not base our decision entirely on this unknown but apparently late style of writing, it is necessary to look for other hints.

Compared with the Matthew portion of the Ms. this quire shows these regular differences:

(1) Much more frequent punctuation, usually a single dot in middle position, but sometimes a colon; punctuation by blank spaces is more common in Matthew;

(2) Less frequent paragraphs, but these project more than one or sometimes than two letters; capitals are larger and rather more frequent;

(3) Frequent curved marks (not breathings) over vowels beginning words or even over two successive vowels; twenty-six cases of correctly placed rough breathings occur in Matthew;

(4) Initial ν has two dots over it instead of one; ξ is much better made, with one, two, or three strokes, but always having a good curve in the middle; one example of a finely made Egyptian μ occurs as a numeral;

(5) Paragraph marks are sometimes the *κορωνίς*, instead of the dash;

(6) Numerals are always given by the letters except once, though the letters had been used but once in Matthew, viz. in the first chapter;

(7) Abbreviations not found in Matthew are $\overline{\nu\epsilon}$, $\overline{\sigma\upsilon\rho\omicron\varsigma}$, $\overline{\beta\lambda\epsilon\iota\alpha}$, while $\overline{\iota\eta\lambda}$ is used for $\overline{\iota\epsilon\rho\lambda}$, which occurs in Matthew; on the other hand, $\kappa\alpha\iota$, $\theta\alpha\iota$, and $\tau\alpha\iota$ are not abbreviated though sixteen cases of such abbreviation occur in Matthew;

(9) Bad spelling and especially itacisms are much more common than in Matthew.

It seems certain that this so different Ms., if it were the parent Ms., must have exerted some influence on even the most careful copyist. I have accordingly searched the remaining

portion of the Gospels Ms. for hints of that influence with the following results:

- (1) There is no variation in punctuation from Matthew;
- (2) Paragraphs are less frequent, especially in the remainder of John and in Mark, but projections and capitals are as in Matthew;
- (3) A rough breathing occurs only once in the remainder of John, forty-seven times in Luke, and three times in Mark; there are no cases of incorrect use;
- (4) The writer breaks his custom and puts two dots over ν once at the end of ten pages; he regularly tries to improve the shape of ξ after a model similar to that of John, quire 1; the one case of Egyptian μ is from a third hand and late;
- (4) The *κορωνίς* paragraph mark occurs once early in Luke and in the same form as in John, quire 1;
- (6) Letters appear as numerals once in the remainder of John, 6 times in Luke, and 19 times in Mark;
- (7) $\bar{\upsilon}\epsilon$ occurs once in John and 6 times in Mark; $\bar{\iota}\eta\lambda$ occurs once early in the remainder of John; *και*, *-θαι*, and *-ται* are abbreviated only once in the rest of John, but 16 times in Luke, and 13 in Mark;
- (8) In Matthew the custom of ruling across the two pages from outer bounding line of text to outer bounding line seems to have been broken but once by ruling to the edge of the parchment, and then for but five lines at the top of a page. In John, quire 1, the ruling seems to have been consistently across the entire parchment. Correspondingly we find that this manner of ruling occurs 7 times in the remainder of John (probably four double sheets), 8 times in Luke, and 6 times distinguishable in Mark;
- (9) The characteristic misspellings of John, quire 1, are ι for $\epsilon\iota$ and ϵ for $\alpha\iota$, while the opposite mistakes are far fewer. In Matthew all four misspellings occur somewhat frequently; ι for $\epsilon\iota$ and $\alpha\iota$ for ϵ are the more common, though much less frequent than in John, quire 1. On the other hand, in the remainder of John, Luke, and Mark $\epsilon\iota$ occurs for ι much more often. This looks as if the copyist, discovering the besetting sin of his parent Ms., had changed every possible case to the opposite spelling. In accord with this we note that ϵ for $\alpha\iota$

almost vanishes, while *ai* for *ε* increases decidedly in the remainder of John. In Luke and Mark the spelling of this sound improves.

To sum up, on points 1 and 2 there was no noteworthy variation. Peculiarities 4, 5, 6, 7, and 8 all creep in sporadically later. The extremes involved in 9 were objectionable to the writer, who reached the opposites in his attempt to avoid them entirely. No. 3 is impossible to classify, yet it is noteworthy that the rough breathing is practically non-existent for John.

These items hardly furnish valid proof that the latter part of John with Luke and Mark were copied from the Ms. of which the first quire of John is the surviving remnant, but the concurrence of such indications, combined with the similarity of text and the extremely ancient appearance of the parchment for these 16 pages, furnishes a presumption for this interpretation.

It must of course be admitted that some of the above-mentioned peculiarities can be explained on the basis of the unquestionable difference in archetype of Matthew and John, if we suppose that a later copyist of John, quire 1, exaggerated or modified those points in which the Ms. of John chanced to differ from that of Matthew.

Yet this explanation can hardly account for all the above variations. Moreover, we have yet to consider the most striking peculiarity. The titles of the Gospels, Matthew, Luke, and Mark, show marked differences from the hand of the text and subscriptions. Perhaps most striking is the fact that the word *εὐαγγέλιον* measures just one inch in length each time in the title, though it measures $1\frac{1}{4}$ inches in both text and subscriptions. Likewise a comparison of the forms of the letters shows that the titles, as well as some 40 instances of second hand in the text and margins, have the following differences from the first hand: *κ* more, but *τ* and *γ* less regularly have dotted points on the ends of the top line; *ν* and *ρ* seem to have shorter tails; *ο* is smaller; *ω* is the same, except for a tendency to curve in at the top; *ε* does not often have the middle line so prolonged as in the text; *μ* seems narrower and the outer lines are almost perfectly parallel, the last one being generally shorter.

These differences, though decided, are yet so unimportant, that I believe the second hand was contemporary, hence the διορθωτής.

The fact that the title of John is also by a second hand suggests that the same person added all four titles; yet this cannot be proved, since the writer who added the title of John tried, though with ill-success, to imitate the hand of the text (cf. PLATE II). Note the following: *α* is different every time, and never exactly like any *α* of the text; *ε* omits the heavy dot on the middle line; *γ* has too light a dot on end of the top stroke; *λ* is too narrow and the second stroke extends above the first; *κ* has a light dot on the upper side, not a heavy one on the under side of the top slanting stroke; *τ* has only one light dot; *ω* has the middle lines rising nearly to the top of the letter and the outer lines curve in only slightly at the top; *ν* seems made with three strokes, the slanting stroke touching the first upright a little below the top, though these two strokes seem to be made in one, forming a perfect angle, by the regular hand of the text. Most striking of all is the lack of a consistent slant. The first *ε*, *ν*, and *ο* have too much and show the natural tendency of the hand. The second *γ*, first *ν*, and *τ* have no slant. Those mistakes which betray the natural character of the hand seem to point toward the second hand of the Ms. as a whole, at any rate toward a sloping hand of the general type of the whole Ms. except these sixteen pages. This seems to prove the first quire of John older than the rest of the Ms., unless we can succeed in showing that the second hand was considerably later. Yet such a conclusion presents very decided difficulties, for it forces us to date the early part of John in the fourth century, a date which passes well with the bad spelling (cf. Westcott and Hort, II, 307), but is decidedly questionable on account of the style of writing.

The natural distrust of a strange hand will lead others, as it has me, to seek a later date for this portion, even though we must confess that nothing exactly like it has thus far been published. It seems to have some general resemblance to the Slavonic sloping uncial hand of the seventh and eighth centuries. Note especially heavy dots or ornamental strokes on *τ*, *γ*, *ν*, *κ*, and the enlarged *φ*. Against this the forms of *ω*, *ξ*, *ρ*, *ψ*, and

especially μ , with middle strokes not reaching to the bottom line, look rather strange. Yet it does not seem an early, but rather a well-developed stage of some such hand. Therefore, if we connect it with the late Slavonic sloping uncial, we must presumably date it not earlier than the eighth century, a very questionable date, since the Ms. shows such plain signs of long use. If we attempt to connect it with the earlier type of sloping hand, which arose on papyrus in the third and fourth centuries, we are met by the difficulty that the remainder of the Ms. is itself a late development of that hand, probably of the fifth century, and it is extremely questionable to suppose that style of writing to have lived on much longer. Furthermore, this hand is clearly a development independent of the hand found in the rest of the Ms., for while the slant is less, the pen was cut with a broader point, and the writing makes more the impression of a papyrus style. Also dots and shadings are more pronounced. Furthermore, individual characteristics, such as capitals, awkwardly projecting paragraphs, and punctuation point toward a later time, though such characteristics are found infrequently even on papyrus fragments of the second century A.D. or earlier.

On the whole I prefer, though with a good deal of hesitation, to call these sixteen pages a part of the parent Ms. and date them in the fourth century.

The other alternative is to call this an early replacing of a torn but still legible quire. Those who take this view will doubtless be inclined thereby to refer the rest of the Ms. to the fourth century, a date which I am not yet ready to accept.

This parent Ms. did not contain Matthew and was perhaps otherwise defective. On the other hand, the Ms. from which Matthew was copied possibly contained the four Gospels, so it will be necessary to watch for its influence in other places. The differences in character of text of the different Gospels point plainly back to a time when the text transmission of each was independent.

Another question, which has been much considered, concerns the place of origin of the Mss. To trace out and interpret all of the stories of Arab dealers is such a hopeless task that in despair I turned to the Mss. themselves.

Of the original subscription to the Gospels, which was written in lighter ink than the Mss. and in a fifth century hand, there remains ϣ $\chi\rho\iota\sigma\tau\acute{\epsilon}\ \acute{\alpha}\gamma\iota\epsilon\ \sigma\acute{\upsilon}\ \mu\epsilon\tau\grave{\alpha}\ \tau\omicron\upsilon\ \delta\omicron\upsilon\lambda\omicron[\nu]$ (cf. PLATE III). Though the first hand has disappeared at the end of the line, the name of some early owner, not necessarily a private person, appeared there. Then the subscription was changed as to name and enlarged by adding a second line ϣ $\kappa\alpha\iota\ \pi\acute{\alpha}\nu\tau\omega\upsilon\ \tau\omicron\upsilon\ \alpha\upsilon\tau\omicron\upsilon\ \text{ϣ}$. This was written in the same shade of light brown ink, but in a smaller, somewhat more cursive hand; the retention of approximately the same color of ink would suggest that any change of ownership accompanying this erasure and addition took place within the original church or monastery. Slightly later the name was again erased and also the letter under σ of $\sigma\omicron\upsilon$ and that part of the Ms., covering ν also of $\delta\omicron\upsilon\lambda\omicron\upsilon$, was probably washed. Then a hand very similar to No. 2 rewrote $\nu\ \sigma\omicron\upsilon\ \tau\iota\mu\omicron\theta\acute{\epsilon}\omicron\upsilon\ \text{ϣ}$ in black ink of the tint used in the cursive note on p. 35 of the Deuteronomy Ms., discussed above, and in certain curved reading marks of the same Ms. This third hand cannot be dated much later than the second, hence the early sixth century. Both the original name and the form of it going with the second version have absolutely perished. Yet from the length of the erasure, extending under ϣ , we may infer that at least one was longer than the present name. Also a letter reaching well below the line occurred near the beginning of the name, in one of the earlier versions. $\sigma\omicron\upsilon$ cannot have stood in either first or second hand, but perhaps $[\tau]\omicron\upsilon$ in the second hand, and, if so, $\tau\eta\varsigma$ in the first, the latter with the name of a monastery, the former of a prior or bishop.

The final or third form of the subscription is translated: "O holy Christ, be thou with thy servant Timothy and all of his." In spite of the interpretations of Professors Goodspeed and Gregory (*Das Freer Logion*, p. 22), I can see no reference to a private owner here, but rather to a church and its congregation. "Timothy" is St. Timothy and "all his" are the worshippers in his church or the inmates of his monastery.

In Abu Salih's *Churches and Monasteries of Egypt* (trans. by Evetts and Butler, p. 190) we read: "Near this place there is a monastery known as the Monastery of the Vine-dresser (Dair al-Karrám), but called by the heretics the Mon-

astery of the Dogs (Dair al-Kilâb). The Monastery is near the Pyramids on the western side and its church is called the Church of Timothy, the monk, a native of Memphis, whose body is buried in it." This Timothy was a soldier in the Roman army and suffered martyrdom in the persecution of Diocletian, 304 A.D. Though Abu Salih, who wrote soon after 1208 A.D., names 707 churches and 181 monasteries, he mentions no other dedicated to Timothy.

Al Makrizi († 1441), while naming 125 churches and 86 monasteries, presumably a complete list for his time, does not mention the monastery of the Vinedresser; it had probably perished before his time.

The Ms. of Abu Salih is defective at the beginning, so that none of the monasteries of the Nitrian Desert are described. This is the more to be regretted as Butler (*Anc. Cop. Churches of Egypt*, I, p. 287) quotes Vansleb (*Voyage fait en Egypte* [1664 and 1672-3], p. 227), that "there were formerly seven monasteries there; viz. Macarius, John the Little, Anba Bishôï, Timothy, Anba Musa, Anba Kaima, and Sûriâni, of which only Bishôï and Sûriâni survive," an obvious error, for besides Macarius, there is left one other, Al Baramus. Al Makrizi (App. to Abu Salih, pp. 320 ff.) names eleven, as known to him, viz. all of the above except Timothy, and besides, Elias, the Virgin of St. John the Dwarf, St. Anub, and the Armenians. The Monastery of Timothy may be another name for the Monastery of the Armenians, or the name may be an error of Vansleb or his informers. I incline to the second alternative, for Al Makrizi also singles out just seven monasteries as existing in his time, viz. the four now remaining and St. John the Dwarf, the Virgin of St. John the Dwarf, and Abu Musa the Black. The second of these was inhabited by the Abyssinians after their two monasteries of John Kama and of Elias were destroyed by worms. So Anba Kaima of Vansleb's list means the Abyssinian monastery, and the two lists agree, except that the Monastery of Timothy is substituted for Al Baramus. This looks like an error of memory or pure invention to complete the desired number seven.¹

¹ The error is partly in Butler's quotation. Professor Goodspeed kindly looked up the original for me and writes as follows: "The fourth monastery in

If we omit this rather doubtful case, the church of Timothy in the Monastery of the Vinedresser was the only one of the name in Egypt. This was a Jacobite, *i.e.*, a Coptic, monastery, and was once burned by the Melkites (Abu Salih, p. 186), probably in the fifth century or the early sixth, for the Melkites were too weak later. This monastery seems to have finally perished in the persecutions of the fourteenth century, but of the fate of its most ancient Bible we hear no word. Yet it seems hardly likely that it was abandoned, especially if any of the monks escaped. They may well have taken it to some more secure monastery.

In this connection the statement of Professor Schmidt (*Theolog. Literaturz.* 1908, p. 359) is of interest, for he says that all four of the Biblical Mss. of the Freer Collection came from the White Monastery, near Sohag, opposite Akhmim.¹ From the same source came three Mss., which he himself bought in Akhmim in 1905: (1) The first epistle of Clemens in Coptic (Akhmimic dialect), of the fourth or fifth century; (2) Proverbs in the same dialect and of about the same date; (3) An Easter letter in Greek, of the early eighth century. These three were bought at the same time and were later proved to have come from the White Monastery. The following year a fragmentary Ms. of Genesis in cursive Greek of the late third or fourth century was obtained of the same dealer. It is supposed to have come from the same source, though proofs fail. These Mss. are all on papyrus and show absolutely no relationship to the Freer Mss. either in content or style of writing.

It seems clear that the White Monastery had a library hidden in the upper part of the massive church (first seen by Amélineau in January, 1885), which had escaped fire and thieves, except those of the monastery itself, during its long history.

Vansleb's list is '*celui de Saint Massime et Timothée.*' Al Baramous was known to Vansleb, therefore, under the name *Maximus quid Timotheus*, which doubtless means *Maximus et Domitius*, as the dedication of that convent is more precisely described by recent writers. Vansleb's error was due to the similarity of sound."

¹ Cf. Goodspeed, *Bibl. World*, 1909, p. 201, who ably supports this view, but seems misinformed as to some essential facts.

Yet the rest of the monastery was plundered and burned several times.¹

At the last plundering (1812), 100 Mss. are said to have perished. Under these circumstances it seems that Mss. could have survived only in this hidden library. Yet the decayed condition of all the Freer Mss. except the Gospels, which were protected by thick board covers, is hardly compatible with preservation in so secure a place.

I further learned from Professor Schmidt, that the Freer Mss. were first heard of in the hands of a dealer of Eshmunên, who showed them at the Mission School in Assiut, and then sold them to Ali Arabi. On inquiry, however, I learned from Dr. Grant of the School, and from the Rev. Dr. Kyle of the United Presbyterians' Missions, that the Mss. were never shown at the school. Professor Schmidt has probably been deceived by one of the numerous Arab stories; all are of equal value with the first one told, viz. that the Mss. came from Akhmim. To accept the White Monastery as the last home of the Mss. would imply that this first story was near the truth. Yet any one acquainted with Arab stories would advise us to look in every other direction first, as toward the Nitrian Desert, or the Fayoum, or the region toward Sinai, if we wish to find the last resting place of this ancient Bible.

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¹ Cf. Denon, *Voyages dans la Basse et la Haute Egypte* (1798), London, 1807, I, 157 f.; Curzon, *Ancient Monasteries* (1833), p. 113.

ANOTHER VASE BY THE MASTER OF THE
PENTHESILEA CYLIX

THE Academy of Natural Sciences in Philadelphia has had in its keeping since 1879 a cylix with a twofold interest: the vase is at present mounted on a foot which bears the signature ΝΙΚΟΣΘΕΝΕΣ ΕΤΟΙΕΞΕΝ (Fig. 1) and the design and workmanship of the cylix itself place it in that class of vases which the late Professor Furtwängler attributed to the "Meister der Pentheseilea Schale." The vase in question is the property of the American Philosophical Society, by whose kind permission I now publish it. In 1879 it was deposited by them for safe

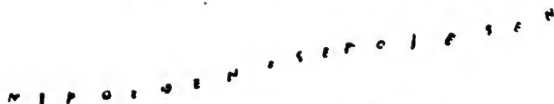


FIGURE 1. — SIGNATURE OF NIKOSTHENES.

keeping at the Academy of Natural Sciences,¹ where it may now be seen. Under the date, June 17, 1836, the Society has the following record of its acquisition:

"Mr. Joseph Bonaparte, Count Survilliers, presented to the Society's Cabinet an Etruscan cup, very antique, found on the estate of Lucien Bonaparte, Prince of Canino, in the researches made in 1828-29 in that district, where the ancient capital of the Kingdom of Etruria called Vitulonia once stood. This donation was accompanied by the 'Museum Étrusque of Lucien Bonaparte,' containing a description of nearly two thousand articles found in the same locality and the first and second parts of the plates in folio." The vase itself has a further tes-

¹ I wish to express my gratitude to the authorities at the Academy for the consideration and kindness shown me. I am especially indebted to Miss H. Wardle, Assistant to the Curators of the Anthropological Department.

timonial of its history in a piece of crumpled paper fastened to the under side of the foot and bearing the inscription :

Fouilles de Canino, 1831.

Marche triumpnale douze fig.

Jaunes, nom d'Auteur. Inscrite.

The cylix (Fig. 2) measures five inches in height (12.69 cm.) and fourteen and one half inches in diameter (35.6 cm.). As may be seen from the accompanying reproductions, the vase has been broken into some thirty pieces and repaired. A very



FIGURE 2. — CYLIX IN PHILADELPHIA.

small bit of the rim is wanting and the entire foot is gone. The interior surface has been painted over in part; the strokes of the brush are clearly visible in the outer field in the reproduction (Fig. 3). The design, however, has not been interfered with, and the preliminary sketch made before the clay hardened is distinctly traceable. The exterior surface has also been repainted in places, but again the drawing has not suffered. The blurred condition of the background and the darker red on the limbs of the youths, as seen in Figure 7, have probably arisen through carelessness in the second firing. The good condition of the outer varnish renders this view the more likely.

The most serious misfortune which has befallen the vase seems to be the loss of the foot. The skilful manner in which the foot and bowl are to-day fastened together and the perfect curvature from the rim of the bowl to the edge of the foot, are at first deceptive and tend to make the work appear an harmo-

nious whole. Closer examination, however, shows that this cannot be the foot which originally belonged to the vase. A comparison of the signature on the foot with other signatures of Nikosthenes, proves that we have here part of a work of Nikosthenes the master of the black-figured style (Cf. *Wiener Vorlegeblätter*, 1889, Tafel VII). Thus even the possibility of a Nikosthenes II who worked in the red-figured style, is removed.



FIGURE 3. — INTERIOR OF CYLIX.

Further, the foot conforms in shape and decoration to the type found in certain cylices of the black-figured style; it has sharply defined edges and not a rounded profile (cf. *Fitzwilliam Museum Catalogue of Vases*, Pl. XXII, 64, 66). In addition, the edge and the under side are left in the natural color of the clay, whereas the rest of the foot is greenish black in color. But even when we have added the foot of our vase to the known works of Nikosthenes, we still have an admirable example of the vase painter's art, intrinsically interesting because of its design and its connection with that class of vases which Professor Furtwängler enumerated under the "Meister der Penthesilea Schale."

Before describing the vase in detail, a few technical points may be noted. The hair and beard are rendered in solid black except the ends, which are usually wavy and rendered in a yellowish brown. Brown is used for the minor anatomical markings; no purple is distinguishable. The eye is of the developed transitional type, approaching the profile. Beneath each handle is a single palmette with tendrils and stop-gaps, a type characteristic of this class of vases (Cf. Furtwängler and Reichhold,



FIGURE 4. — INTERIOR DESIGN OF CYLIX.

Griechische Vasenmalerei, p. 280). The meander pattern which encloses the interior design consists of sets of seven, eight, twelve, and seven meanders, separated from each other by "red cross squares."

The design on the interior of the vase (Fig. 4) represents a youth pursuing a maiden. The scene takes place in some sacred region, as is denoted by the altar at the left. It is probably to be connected with a religious festival, for we know that Greek maidens had greater freedom than usual on such occasions.

At the right of the design, a maiden wearing an Ionic chiton and a himation catches up her garments and moves hastily to the right to escape from the youth who follows her. He is nude except for a himation draped over his left shoulder and caught up in his right hand from behind. With his left hand, he grasps the shoulder of the fleeing maiden, who turns toward her pursuer. The features of the drawing which one particularly notes are the feeling for rapid movement conveyed and the liking shown for elongated figures, especially noticeable in that of the youth.

The exterior design may perhaps be termed a scene of departure (Figs. 5, 6, 7). The palmettes beneath the handles divide

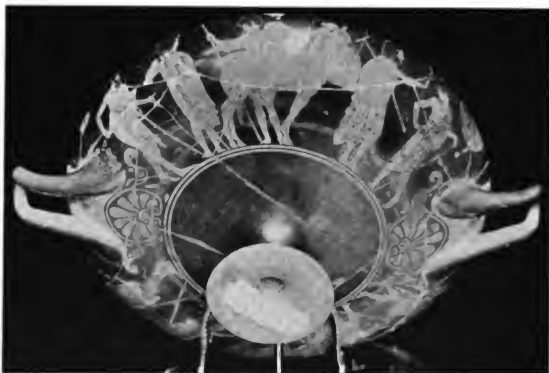


FIGURE 5. — OUTSIDE OF CYLIX.

the field into two very similar parts ; on each half of the kylix are five figures, youths and bearded men, arranged in two groups. The central figure and the one of greatest interest in each case is that of a youth wearing a chlamys, with a petasos hanging at the back of his neck. He stands behind a horse which is drawn in a lifelike manner ; the pose of the fore feet and the erect position of the head give it a spirited air and add to the charm of the picture. The youth is in quiet conversation with another youth and a bearded man at his right. Both



FIGURE 6. — EXTERIOR DESIGN OF CYLIX.

wear the himation and lean on a staff. The bearded man and the youth at the right of the design are similarly dressed and equipped. In both cases, the men seem to be giving instructions to the youths before them, perhaps in regard to the intended departure of the central figure. The scene no doubt has reference to the corps of the *ἐφηβοί* in Athens, youths from eighteen to twenty years of age. They were recruited from the upper classes and it was their duty to serve as a sort of patrol (*περίπολοι*) to guard the frontier. We probably have here an *ἐφηβος* departing for some such service. The other half of the design (Fig. 7) differs little from the one described, ex-

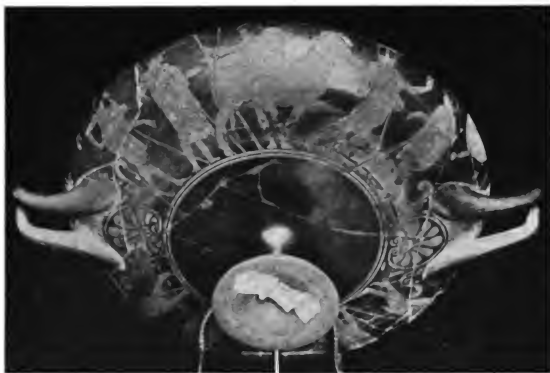


FIGURE 7.—OUTSIDE OF CYLIX.

cept that the departing youth has a spear in this case instead of a staff, and the place of the bearded man at the right of the design is taken by another youth. The pose of this youth is most extraordinary; he seems to be admiring some object which he holds up before him, perhaps a flower. Several objects hang on the wall, a tablet, a sponge-bag, and two shields with the end of a sword visible beneath, in each case.

An interesting parallel to this exterior design is to be found in the exterior of the "Penthesilea Schale" in Munich (cf. O. Jahn, *Vasensammlung König Ludwig's*, 370; Furtwängler

and Reichhold, *Griechische Vasenmalerei*, p. 31; Pl. 56). The character of the composition and the technical points of style leave no doubt that our vase was painted by the same hand as the Munich cylix. The class of the vases to which these belong was first discussed by Hartwig, *Die griechischen Meistergeschalen des strengen rothfigurigen Stils*, pp. 491 ff. Later, Furtwängler enumerated them in his *Griechische Vasenmalerei* and gave to the master¹ the title of "Meister der Pentesilea Schale," from his finest composition.

To this list the Philadelphia vase must now be added. Several traits betray the master. First, the liking for horses, which he introduces on all of his vases. He depicts them in his own characteristic manner; they are always shown with lifelike spirit in the same technical details of drawing. It needs only a glance at Plate 56 of the Furtwängler-Reichhold publication and our vase to note the striking similarity in the poses of the horses and the rendering of muscles, mane, and tail. The master invariably represents the tail by parallel lines beginning from above and extending to the end, whereas his contemporaries use hair-lines only at the end or inner side of the tail. The greater part of his exteriors are scenes of departure in which the poses of the youths and men and the

¹ The vases of this master according to Professor Furtwängler, *Griechische Vasenmalerei*, p. 283, are as follows:

1. Euphronios cylix in Berlin, Hartwig, Pls. 51, 52.
2. Anesidora cylix in London, *Br. Mus. Cat.* III, D 4; *White Athenian Vases*, Pl. XIX.
3. Aphrodite on the Swan, *Br. Mus. Cat.* III, D 2; *White Athenian Vases*, Pl. XV.
4. Cylix of the death of Orpheus, *J.H.S.* IX, 1886, Pl. VI.
5. Cylix in the Louvre, *Mon. Grecs.* II, Pls. V, VI.
6. Cylix in Hamburg, *F.R.*, Pl. 56.
7. Cylix in Paris, Ridder, *Cat. des Vases de la Bib. Nat.* No. 814, Figs. 111, 112; Pl. XXII.
8. Pentesilea cylix in Munich, O. Jahn, *Vasensammlung*, 370; *F.R.* Pl. VI, LVI.
9. Tityos cylix in Munich, O. Jahn, *Vasensammlung*, 402; *F.R.* Pl. 55.
10. Cylix in Bologna in Museo Civico, Gerhard, *Auserlesene Vasenbilder*, Pls. 291, 292.
11. Two cylices in Munich, O. Jahn, *Vasensammlung*, 794, 797 (careless).
12. Cylix in Lord Aldenham's possession. *Illustr. Cat. of Ancient Greek Art.* Burlington Fine Arts Club, 1904, No. 15.

technical details are similar. A further point of connection is the single palmette with the tendrils and stop-gaps, characteristic of this class of vases. In all cases, as in this one, the inner design is of greater artistic worth than that of the exterior. Professor Furtwängler saw in this master a painter whose influence was felt from the period of the severe style (*ca.* 500-460 B.C.) into the fine style (*ca.* 460-440 B.C.) and one who frequently worked on a large scale, as is evidenced by the Penthesilea and Tityos cylices. Our vase belongs about 470 B.C. The artist has not yet attained to the grandeur of scale seen in the "Penthesilea Schale," and yet there is a suggestion of it in the manner in which he fills the interior field and in the free and swift movement of his figures. It is of interest to know that Philadelphia has a large vase by this hand. The interest is heightened by the fact that we also have a fragment of a work by the maker of black-figured vases, Nikosthenes, who signed the foot which now supports the vase.

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HEAD OF HERACLES, FRONT VIEW

A HEAD OF HERACLES IN THE STYLE OF
SCOPAS

[PLATE IV]

THERE is in private possession in Philadelphia a very beautiful head of Heracles said to have been found at Sparta in 1908.



FIGURE 1. — HEAD OF HERACLES, BACK.

American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. XIII (1909), No. 2.

It is broken in two at the ears so that the whole back part is missing, and in this condition was discovered built into a wall. It is said to have been turned face inward, so that before its removal it appeared to be merely an elliptical-shaped stone.



FIGURE 2. — HEAD OF HERACLES, PROFILE..

Some confirmation of this story is to be found in the condition of the surface of the broken part (Fig. 1), which shows signs of weathering.

The head (PLATE IV) is of Pentelic marble 23.7 cm. high,

and 14.5 cm. from the edge of the lion's skin to the bottom of the chin.¹ It represents the god as beardless, with the scalp of the lion drawn over the top of his head so that the muzzle and teeth of the beast come down over the forehead. The left side of the face, as one looks toward it (Fig. 2), has taken on the rusty or golden color so common in Pentelic marble; but on the right side (Fig. 3), which is somewhat weathered, this is entirely lacking. This suggests that the head, when it was first broken from the body, fell in such a way that the face was half buried in the ground and the upper half thus exposed to the elements; and then, at some later period, perhaps when it was used as building material, the back part was broken off. The head was separated from the body at the point where the chin joins the throat. The vertical break comes just in front of the ears, above and in front of which the hair is well shown. The minor injuries are these: the muzzle of the lion with the projecting fang on the right² side; a slight break on the eyebrow on the same side; the tip of the nose; the tip of the lion's fang on the left side; very slight breaks on the chin and to the left of the mouth. In addition there are the following small breaks which seem to be recent: two places on the top of the lion's skin at the back; also where the lion's skin joins the hair on the left side; and just below and in front of the left ear. These breaks may have been made in taking the head out of the wall, if the story of its discovery is true.³ The face is thus very well preserved.

¹ The complete measurements are these:

Total height	23.7 cm.
Total width	16.2 cm.
From lion's skin to bottom of chin . . .	14.5 cm.
From lion's skin to root of nose . . .	8.5 cm.
From lion's skin to mouth	10.3 cm.
Height of forehead	3.2 cm.
Length from inner corner of eye to chin	10.7 cm.
Distance between outer corners of eyes .	9.0 cm.
Length of eye with tear duct	3.0 cm.
Length of eye without tear duct	2.7 cm.
Height of eye without lids	1.0 cm.
Width of mouth	3.5 cm.

² Right and left are used throughout with reference to the spectator.

³ In this connection it should be remembered that the heads found at Tegea in 1879 had been built into the walls of a house by a peasant; and that the

The forehead is divided horizontally by a curved line depressed in the middle, and the part below this line and above the



FIGURE 3. — HEAD OF HERACLES, PROFILE.

bridge of the nose bulges out prominently. The projection of the frontal bone, or of the flesh over it, is marked. The eyes are deep set and the upper lid is drawn back so that it has a
sculptures found on the same site in 1901 were, with one exception, built into Byzantine walls (cp. Mendel, *B.C.H.* XXV, 1901, p. 257).

breadth of only 2 mm. Both eyes are turned slightly upward and to the spectator's left as though looking at some object in that direction. The upper lid slightly overlaps the under at the outer corners; and the tear ducts of the two eyes differ slightly from one another, that of the right eye curving downward and ending in a point, while that of the left eye is more nearly horizontal. There is no trace of paint, but there still seems to be a faint indication of the iris of the left eye. The mouth is small and the lips are parted. The chin is likewise small, and the whole face full and round. This, together with the regular features and the earnest expression, gives the head its great beauty. The treatment of the hair may be seen very well in front of the ears. It consists of small, round curls bunched together; which is sufficient proof, if one is needed, that the head is a male head, and that it cannot represent Omphale masquerading in the lion's skin.

The characteristics of this face are very marked. The forehead with the line in the middle and the swelling below this line, the prominent brow, the deep-set eyes, the parted lips, the round face, the hair in small round bunches, are all characteristic of the male heads commonly attributed to Scopas on the basis of the two heads from the pediments of the temple of Athena Alea, discovered at Tegea in 1879, and now in Athens. It is true that we are nowhere explicitly told that Scopas was the author of these pediment groups; but the facts that he was the architect of the temple, and that the heads have distinctive features of their own which cannot be connected with any other known sculptor, have rightly been regarded as sufficient evidence for attributing them to him. Professor Ernest Gardner in discussing the head which he regards as that of the Atalanta of the Tegea pediment, after commenting upon the intensity of expression of the helmeted head in Athens, speaks of the eyes thus:¹ "The eyes are set very deep in their sockets, and heavily overshadowed, at their inner corners, by the strong projection of the brow, which does not, however, as in some later examples of a similar intention on the part of the artist, meet the line of the nose at an acute angle, but arches away from it in a bold curve. At the outer corner the eyes are

¹ *J.S.H.* XXVI, 1906, p. 172.

also heavily overshadowed here by a projecting mass of flesh or muscle which overhangs and actually hides in part the upper eyelid." These words might be written of the Philadelphia head; although it does not have the eyes quite so wide open, nor is it bent to one side in the same way, and its expression is earnest rather than pathetic. Equally striking is the resemblance to the second head from Tegea, which, in spite of its mutilated condition, shows what seems to be the same treatment of the forehead and the same manner of representing the hair.¹ More interesting still in this connection is the beardless head of Heracles found at Tegea in 1901 and likewise belonging to one of the pediment groups.² So far as it is possible to judge from the reproductions, this much-injured head has the same features: the peculiar forehead, the prominent brow, and the narrow upper eyelid; but the treatment of the hair appears to be different. The workmanship of this head is said by Mendel, who publishes it, to be inferior to that of the other Tegea heads. He thinks it was intended to be seen from a distance, and that it is to be attributed to the school of Scopas rather than to the master himself.

The points of resemblance which the Philadelphia Heracles bears to the heads from the Tegean pediments are so many and so striking that they must all be traced back to the same sculptor; and that he was Scopas there can be little doubt. But among the few works of Scopas known to us from literary sources there is none which exactly corresponds with this head. In a passage in his second book (II, 10, 1) Pausanias says that in the gymnasium at Sicyon there was a marble statue of Hera-

¹ The measurements of the Philadelphia head, where it can be compared with the two heads from Tegea, are as follows (cf. Graef, *Röm. Mitt.* IV, p. 209):

	Philadelphia Heracles	Head from Tegea without helmet	Helmeted head from Tegea
From lion's skin to bottom of chin	14.5 cm.		
From hair to bottom of chin		16.0 cm.	
From hair to root of nose		10.1 cm.	11.1 cm.
From lion's skin to root of nose	8.5 cm.		
Height of forehead	3.2 cm.	4.3 cm.	
Length from inner corner of eye to chin	10.7 cm.	10.8 cm.	
Length of eye	3.0 cm.	2.5 cm.	3.1 cm.
Width of mouth	3.5 cm.	3.8 cm.	ca. 4.0 cm.

² *B.C.H.* XXV, 1901, pp. 258 f., and Pls. VII and VIII.

cles by Scopas; and attempts have been made to identify with it a standing figure on a Sicyonian bronze coin in the British Museum.¹ The coin is unfortunately considerably worn, but the statue of the god seems to be beardless and to be wearing a garland. He is holding in his right hand what appears to be his club and over his left arm the lion's skin. There are in various European museums copies of a beardless Heracles which show the influence of Scopas to a greater or less degree, and attempts have been made to trace them back to this original at Sicyon. They may for convenience be divided into three classes: (1) those in which the god is crowned with a chaplet of leaves; (2) those in which he wears the lion's skin on his head; and (3) those in which the head has no covering. They are discussed at length by Graef.² The first class is by far the most numerous, the best example being the head from Gensano in the British Museum. The figure on the coin may be copied from the same original, and if so it becomes very probable that the Heracles at Sicyon mentioned by Pausanias was crowned with a garland of leaves. The Philadelphia head, therefore, probably goes back to some other work of Scopas of which we have no record. The fact that it is broken in two in front of the ears makes it impossible to say whether it belonged to a figure in high relief or to a statue in the round. The position of the eyes seems to indicate that it was part of a group. The striking feature about it, aside from its beauty, is its fineness of execution. One might, perhaps, be tempted to regard it as an original Greek work by some sculptor dominated by Scopas, and this may be the case; but no one outside of his immediate school is likely to have followed his peculiarities so closely. As far as the technique is concerned, the head is not unworthy of the master of the Tegean pediments himself, and Scopas is known to have worked in Pentelic marble (Paus. VIII, 47, 1). But if we take all things into consideration, we must, I think, conclude that the Philadelphia head is probably a very good copy of a lost work of Scopas.

WILLIAM N. BATES.

¹ F. Imhoof-Blumer and P. Gardner, *Numismatic Commentary on Pausanias*, p. 30; cf. *Röm. Mitt.* IV, p. 213.

² *Röm. Mitt.* IV, 1889, pp. 189-226; cf. Reinach, *Gaz. B.-A.* 1890, p. 340.

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A SERIES OF SCULPTURES FROM CORINTH

[PLATE V]

I. HELLENIC RELIEFS

THAT the excavations at Corinth should yield but scanty returns to the student of sculpture is natural. The sack of the town by Mummius in 146 B.C., and the wholesale removal to Rome of such sculptures as escaped destruction, left little hope for important remains from the Greek period. The new Roman town was of course adorned with a multitude of cult statues, votive offerings, and decorative sculptures, but even these have met with unusually rough handling. At such places as Delphi, Olympia, and Epidaurus circumstances were favorable for the preservation at least of works in marble, for as the old cults lost their hold the precincts were abandoned, and when the buildings became ruinous, the statues lay as they fell, protected by the débris above them. But at Corinth the site was continuously occupied; Romans of the empire, Franks, and Turks all took their turn at rebuilding, and old sculptures were valuable building material. So of the few works that have come down to us, the most were either built into Frankish or Byzantine walls (with such inconvenient projections as heads, hands, or attributes deliberately knocked away), or gathered together in fragments, ready to be burned for lime.¹

Yet despite the small quantity, the material at hand represents in a modest way the whole development of Graeco-Roman sculpture, from the best Greek period to the close of the Roman Empire. We have fragments from the fifth cen-

¹ The deposit found in the theatre in 1904 seems to have been collected for a lime-kiln.

tury B.C., from the fourth century, from the Hellenistic period, and from early and late Roman times.

In the best Greek period (fifth and fourth centuries) may safely be placed three relief fragments,—presumably all from grave-monuments.¹

1. (Fig. 1.) Inventory No. 729. Found April 13, 1897, "a little east of Pirene and north by 10 m." Fragment of relief with a head in profile. Marble fine-grained, granulated by weathering, best preserved on neck.



FIGURE 1. — RELIEF FROM CORINTH.

Projecting portions (locks, edge of ear, sides of lips) much worn, nose chipped away. Fragment broken on all the edges; back of slab rough-hewn. Length of face from upper edge of forehead to chin, 0.103 m.; breadth from bridge of nose to ear, 0.066 m.; maximum height of relief, 0.043 m.

Since the slab nowhere presents an original outer edge, we have no means of determining the exact motive of the figure

¹ It is interesting to note that the one other fragment from good Greek times, found at Corinth before the time of the American excavations, is also a grave fragment, presumably of the fourth century. Athens, Nat. Mus. No. 751; Loewy, *Ath. Mitt.* 1896, p. 150 and pl. V.

nor the part it played in the composition of the relief as a whole. The head was certainly bent forward about as shown in the illustration. That it belonged to a young girl can be inferred from the peculiar style of hair-dressing, with the locks brushed up loosely from all sides and caught in a little knot on the top of the head. A similar coiffure is worn by two figures on Attic grave reliefs,¹ both of whom wear the long, ungirt tunic usual for very young girls. One of these, the Nikagora,² is standing alone looking down at a bird in her hands. The other³ is attendant on a seated figure, mother or older sister rather than mistress, to whom she hands a jewel-box. In the case of our head there is nothing to determine whether it belonged to the principal figure or to an attendant. In the latter case, the figure was of course standing; in the former case, probably so; for on monuments of very young boys and girls the seated figure is not found.

The fact that we possess only the head also increases the difficulty of any attempt to place the monument in a definite school and period. For it is in the torso and drapery that the distinctions between Attic work and that of northern Greece or Boeotia come out most strongly. The quality of the relief, however, suggests Attic work. Worn as the fragment is, the values are perfect; the planes drop into exactly the right relations; the details are indicated firmly, yet without excessive eagerness. The whole is marked by the quiet mastery of form, the evenness of workmanship, that is one of the surest indications of the Attic chisel. This general impression cannot be supported by any details of mannerism. The mouth, one of the most characteristic Attic features, is so marred as to be useless for purposes of comparison. And one technical detail, if it has any significance, points away from Athens. There are two modes of rendering a profile head common in Attic relief. Either the artist modelled only the side of the face next the spectator and made the transition from the plane of the nose and the forehead to the background by means of a vertical

¹ Also by one of the daughters of Peleus in the Lateran relief.

² Athens, Nat. Mus. 894. Conze, *Att. Grabreliefs*, 826.

³ High relief in the Karapanos collection. Athens, Nat. Mus. Conze, *Att. Grabreliefs*, 71.

boundary plane, as is done in many instances on the Parthenon frieze; or, when the relief was higher, he rendered the whole front face, giving the further side a more sketchy treatment and possibly less depth. In our relief, on the other hand, though it is so low that one might expect the sharp vertical outline, we find the further side of the face represented as if cut through by the background, so that the eye is bisected and the corner of the mouth cut off. The only parallel for this treatment which I can now recall is a non-Attic stele of the fifth century—that of Diodora of Thespiae.¹ Despite this technical peculiarity, the general quality of the head is such that I still incline to call it Attic.

Its date would probably fall in the third quarter of the fifth century B.C. Though the distance from the front plane to the background is relatively considerable, the relief is handled as if it were low.² The inner edge of the eye is actually on a lower plane than the outer, yet the eye on the whole is nearly parallel to the relief-plane; and the tear-duct is just barely visible to one standing at the normal point of view. Both these qualities, the low relief, often "stilted out," as it were, from the background, and the profile eye rendered as if from a front view, characterize the Parthenon frieze and the grave-reliefs, Nos. 714 and 716 in the National Museum at Athens,³ made directly under its influence. They tend to disappear toward the end of the century in the period of which the Nike balustrade is the characteristic expression.

So far, then, as can be judged from the fragment, the relief was Attic work, of the decade just after 440, and contained at least one figure of a girl, standing.

2. (Fig. 2.) Inventory No. 858, "found July 27, 1905, near the dump of 1904." Piece of thin slab with fragment of face in low relief. Marble rather coarse-grained; takes yellowish patina. Broken diagonally across the upper edge of the forehead to the bridge of the nose and from the temples to the chin, so that eye, nose, and mouth remain intact; all of chin excepting very front portion chipped away. Surface has weathered and become somewhat granular, and on lower part of cheek flaked away a little with the grain of the marble.

¹ Athens, Nat. Mus. No. 818.

² The height from the background is actually 0.042 m., but all the modelling effective from the normal point of view is crowded into a height of 0.027 m.

³ Conze, *Att. Grabreliefs*, 321 and 293.

Finish probably never high; marks of chisel around eye-socket and wing of nostril. Edges of planes, however, still clean-cut, except for bruise on



FIGURE 2. — RELIEF FROM CORINTH.

tip of nose and upper lip. Back of slab finished smooth. Maximum length of fragment, 0.16 m.; length of nose, 0.06 m.; length of chin and lips, 0.06 m.; height of relief (so far as can be measured from existing portion of background), is 0.015 m.; thickness of slab, 0.02 m. to 0.26 m.

That the head comes from a grave-stele is very probable. The finish of the back and the slight depth of the relief in proportion to its size preclude the possibility of regarding it as architectural sculpture, while the large size and the furrow under the eye, evidently intended to express grief, are inappropriate to a votive relief.¹ A fragment

still remaining on the edge of the forehead shows that the hair was brushed back in waves from the temples, hence the face was that of a woman.

Its rendering is marked by certain strongly defined traits, resulting from an endeavor to carry out laws which the artist did not fully grasp. The planes of forehead and cheek are held carefully parallel to that of the background. Even the eye is not only drawn as if in full front, with the lachrymal gland carefully wrought out, but set with the outer and inner corners at almost the same level. There is, moreover, an evident effort to keep the bounding surfaces, at least the bridge of nose, the

¹ The only instance known to the writer of a large votive relief of good Greek period is the Eleusinian relief in the National Museum at Athens (No. 126).

forehead, and the outer edge of the cheek, in touch with an ideal front plane, instead of letting them fall one behind another in natural perspective. Yet with all this there is nothing of the clumsy layer-like effect of the early Laconian stelae.¹ The individual features are shapely and firm in modelling; the mouth, in particular, has that delicate crispness in the surfaces of the upper lip that is familiar in the best Attic work. There is no hesitation in the transitions from plane to plane, yet they are rendered with enough subtle gradation to save the work from any appearance of overemphasis, and to impart to the almost concave surfaces of the cheek a certain semblance of roundness. One trait that contributes to the air of refined decision in the head is the straight furrow, starting from the inner corner of the eye, a sign of grief familiar enough in Italian drawings, but rarely hinted at in even the most expressive of the Greek grave-stelae.

The nearest parallels for the relief are found in Attic work in the middle of the fifth century. The delicate definition of the rendering is a mark of the Attic chisel at all times; the special form chosen for the mouth (with the clear-cut lip of rather complicated outline) occurs in Attic sculpture from the days of the Discobolus down through the fourth century.² The single work with which it has most points of contact is perhaps the Eleusinian relief. Both show the same use of very low yet sharply outlined relief on a large scale, the same rather severe drawing, the same touches of lingering archaism both in the long eye and in the equality in length between the nose and the lower part of the face. The mouths of Demeter and Kore have been chipped away so that hardly more than their bare outlines remain, but in a relief of a youth in the Vatican,³ which resembles the Eleusinian relief rather closely in other ways, the mouth has the characteristic shape seen in our head. One feels tempted to see in our head the same struggle of the last remnants of

¹ For example, the stele of Chrysapha, *Ath. Mitt.* II, pl. XX.

² To make clear to one's self the distinctive Attic form, one has only to compare the mouth of the Munich Oil-pourer with that of the Amazon of Cresilas or the Doryphorus.

³ Anderson photograph, No. 1484.

archaism with the new freedom and richness of design as in the Eleusinian relief and to assign both to the same epoch; that is, contemporary with or just previous to the Parthenon frieze.

But there are certain points in which our head differs from the Eleusinian relief or any other Attic work. The eye, while carefully drawn, with even a little realistic touch in the fine folds under the lower lids, is set uncompromisingly in full-face. This peculiarity occurs, to be sure, in definitely archaic Attic work, like the stele of Aristion or the relief with the head of a discobolus, but in the earliest works of the freer style, as the Athena leaning on her spear or the oldest portions of the Parthenon frieze, it is already softened. In these latter the lachrymal gland is indeed represented, but the plane of the eye is made to bend more or less sharply toward the background at the inner corner. Thus the effect is nearer that of a true representation in profile. This softer rendering constitutes one of the differences between the Eleusinian relief and ours.

Further, the Eleusinian relief shares with all Attic work from the time of the Athena leaning on her spear a certain sense of perspective in the management of the planes. However low the relief, one feels the regular gradations of distance from the highest point to the background; the features fall into their proper places, and there results that sense of a well-ordered whole, of mastery in technique, which forms so essential a part of the specific Attic charm. In the head under consideration, as we have seen, just that sense of perspective is lacking. The well-wrought separate features — eye, lips, nostrils — are set in an almost flat surface, a cheek which is raised from the background no more than is the ridge of the nose, and sometimes actually less. The lowness of the modelling as a whole and the refinement of the transitions disguise somewhat this uncertain handling of relief conventions, but the moment one compares this head with a genuine Attic work, its defects are plain.

Flatness of relief combined with archaism in the representation of the eye are found in various non-Attic sculptures, especially those of Northern Greece. Philis¹ and the youth from

¹ Louvre; Brunn-Bruckmann. *Denkm.* No. 232 a.



RELIEF FROM CORINTH.

Pella¹ unite these traits with charm of design, the Thessalian youth with a hare,² and Polyxena³ show them with cruder workmanship. But none of these other examples have the freshness and strong individuality that characterizes our relief. The delicate emphasis on the tear-worn furrow of the cheek may not be Attic, but it certainly is not Thessalian or Boeotian. On the whole, the work seems to stand alone: in execution, not disciplined to perfect technique, yet able to absorb much of the Attic refinement; in expression, fresh and independent.

3. (Plate V.) Very different in form, but not altogether in character, is the third stele.

Inventory No. 187. Found May 2, 1900, west of the propylaea, depth not stated. Lower part of relief, representing legs and feet of a man, and hind quarters of a dog. Feet rest on a plinth 0.155 m. high and 0.134 m. deep. Maximum height of relief-ground above plinth, 0.297 m.; full width not preserved, but from intact right end to broken left, 0.86 m.

Inventory No. 126. Found May 16, 1900, west of propylaea, 3 m. north of tall martyra. Part of same relief, containing torso from neck to middle of thighs. Full breadth of stele preserved, 1.047 m. Length of figure from pit of neck to inner edge of break on right thigh, 0.828 m.; breadth of shoulders, 0.40 m.; pit of neck to nipples, 0.165 m.

The two pieces do not, of course, fit by contact, but the motive, dimensions, and workmanship leave no doubt that they belong together. Not only does the position of the leg in the lower half of the relief correspond with the thigh in the upper, but even the shaft of the hunting-spear reappears just behind the dog's hind legs. The surface is in excellent preservation. The plinth on both faces is dressed rough, as if with a coarse-toothed chisel. The background is slightly roughened by long, very shallow furrows, made by some blunt instrument; the flesh, though smooth and firm, has not the crystalline quality of the best Attic work, nor is it sharply distinguished in texture from the drapery. The difference between the two in effect is due to the fact that the flesh offers broader, unbroken surfaces to reflect the light, rather than to any essential variation in rendering. Both flesh and drapery show fine chisel marks almost like cross-hatching, which, so far as I can tell, disappear

¹ Constantinople; Brunn-Bruckmann, *Denkm.* No. 232 b.

² Athens, Nat. Mus. No. 741.

³ *Ibid.*, No. 733.

in the parts of the flesh that come into highest light, and grow deeper in the shadowed portions or those farthest away from the spectator.

The relief represents a youth standing with both feet on the ground, and the weight thrown somewhat on the left foot. He leans a little on the long shaft, presumably a hunting-spear, which he holds with bent left arm. The right arm hangs quietly at his side. He wears a short chlamys, caught on the left shoulder, and hanging in limp folds over the breast and left side, while the right side is bare. The head is gone, but so far as one can judge from the remains of the neck, must have been erect and turned very slightly to the left side. Beside the youth sits his dog. The upper part of the body and the head are missing, but all four feet and the tail rest motionless on the plinth, so that it seems as if the head must have been at rest, too, looking quietly off to the right.

The motive of the youth with his dog is familiar in late sixth century and in fifth century work, from the time of the stele of Alxenor¹ to that of the "Agathokles"² or a somewhat later instance from Thespieae.³ So far as I know, the motive is non-Attic. With the exception of one found at Carystus,⁴ the instances which I have counted in the National Museum are all from Boeotian towns—Orchomenus, Thespieae, Tanagra.⁵ From the motive as developed in this group our stele differs in spirit. In the Boeotian stelae the dog is an essential part of the composition. He appears as the comrade of the youth, stretching up his head toward his master in play, or at least to receive an absent-minded caress. And the youth himself is pictured in a moment of idleness, resting after the gymnasium (Agathokles, stele from Tanagra), or lounging in the agora (Naples and Orchomenus stelae). But in the Corinthian relief the dog is no longer a playmate, but a part of the hunter's equipment. Both master and hound stand motionless, staring off into space, waiting but not alert, more like heraldic symbols of the chase

¹ Athens, Nat. Mus. No. 39.

² *Ibid.*, No. 742.

³ *Ibid.*, No. 829.

⁴ *Ibid.*, No. 730.

⁵ I have not included certain instances where the dog formed a subordinate motive, as in the fine fourth century group in Athens, Nat. Mus. No. 869, nor others where children were playing with dogs, but have confined my list to the grown youth with the dog.

than a group knit by any warm impulse of shared activity. This cold immobility marks off our relief not only from the Boeotian series, but also from the whole range of stelae of the good period. The monuments of the fifth and fourth centuries owe their greatest charm to the fact that they are not general and "statuesque" in character, but that each one seems to have caught its own special aspect from actual life; that each presents a definite action with all the suppleness and ease of unconscious motion. Even when, as in the Melite¹ or the Tynnias,² the action does not involve movement, it still has its individual aspect, still is spontaneous. Tynnias is not posing as the type of a dignified Athenian citizen. He has sunk naturally into his chair, and one sympathizes with his pleasant thrill of relaxation as he allows his shoulders to droop forward a little and his arm to lie inert across his lap. The figure is full of nobility, but it is that of a real man, caught in an unconscious moment. Melite, too, whose pose is the nearest of any to that of our Corinth figure, is no mere type, but a woman of definite personality, who has thrown herself for a moment against a convenient pillar, and looks out challengingly at the passer-by. In contrast to this freedom and individuality, the Corinthian figure has the unbending remoteness of a cult statue. Even the drapery has stiffened in sympathy, and hangs in the folds to which its own weight has dragged it, unstirred by any motion or breath of wind.

In execution as well as in motive, the artist differs from his Attic and Boeotian contemporaries. He has learned from them neither the proportions of the human figure nor the laws of relief, and in consequence is wavering in his grasp on both. He has placed the lower edge of the breast very little below the armpit, and in his struggle to crowd the feet upon the plinth without adequate foreshortening, has made them about two-thirds their normal length.³ His embarrassments with relief-technique are seen not only in a choice of a pose which compels him to represent the feet either foreshortened or too small, but also in the unsuccessful perspective of the torso. The figure is outlined

¹ Athens, Nat. Mus. No. 720.

² *Ibid.*, No. 902.

³ Length, measured on the inside of the foot, 0.15 m.; normal length of foot, on basis of estimated height of 1.84 m., should be 0.23 m.

as if for a full front view; that is, the median line from the pit of the neck to the navel divides the torso into two approximately equal halves. But as if from a wish to correct the "frontality" of the drawing by the modelling, the left side is in very low relief, while the right arm and thigh are almost in the round. The same inequality may be noticed in the dog, whose tail lies out along the plinth in full round, while his body is rendered in very low relief. Another instance of technical groping is the deep undercutting of the mantle just over the abdomen on the right side, and between the legs. In the former instance the modelling in the crevice can be seen only by looking at the stele in sharp profile, a point of view with which the artist certainly did not need to reckon; in the latter, even supposing the stele were to be seen from below, the cutting is twice as deep as necessary.

Yet the relief has nothing mechanical about it. Its stiffness and timidity are such as are natural in the work of an artist a little baffled by the laws of his craft, who yet works lovingly at every bit of his surface, who insists on studying his drapery afresh, even though the result be less pleasing than if he had taken a scheme ready-made from his predecessors; and who occasionally attains to such exquisite bits of modelling as the right arm of the figure or the haunches of the dog.

As for the period, a piece of provincial work must be dated by its most advanced traits, not by its archaisms. The handling of the drapery, which clings close to the figure along the left side, and breaks in a series of triangular folds with wavering surface, can hardly, I think, be earlier than the epoch of the Nike balustrade and the grave-relief of the lad with the bird-cage,¹ the style of work which one dates in the last decades of the fifth century. The mistaken attempt to give the figure perspective by varying the height of the relief on the two sides and by making the lower relief pass by slight transitions into the background, instead of being sharply outlined against it, belong also to the later years of the fifth century. As such innovations penetrate a little more slowly to provincial ateliers, I should incline to date the work at about the end of the fifth or beginning of the fourth century.

¹ Athens, Nat. Mus. No. 715.

It is for private commissions like funeral or votive reliefs that foreign workmen are least likely to be employed; hence it is here, if anywhere, that one may look for indications of a native Corinthian school. The material at hand is scanty; we have but four¹ reliefs, one of which (No. 1) is almost surely Attic, and another, that in the National Museum at Athens, offers too many abnormal traits to be very valuable as evidence. On such a basis one dares not formulate conclusions, but I cannot resist pointing out that our numbers 2 and 3 have in common a certain undisciplined power of observation, a certain wayward sensitiveness to beauty which leads to the selection of lovely or vividly expressive detail, while both lack the power of composition and the technical mastery which fuse the details into a finished whole.

The preceding pieces were indubitably Greek, and can be attributed to the fifth or the early part of the fourth century. To the fourth century or early Hellenistic period probably belongs the maenad basis published by Dr. Richardson in this *Journal* (VIII, 1904, pp. 291 ff.), a piece which shows boldness and grace of design and masterly handling of texture, but lacks anatomical correctness and restraint in the management of the relief.

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¹ I include the relief in Athens, Nat. Mus. No. 751; see above, p. 1, note 2.

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THE SO-CALLED FLAVIAN ROSTRA

THE group of remains at the west end of the Forum, commonly known as those of the Flavian rostra, has been, since its discovery a century ago,¹ the object of ever-increasing interest.² The problems suggested by these remains have been many and varied, concerning the more important of which no final solution has as yet been reached. In March, 1908, while I was studying the brick-faced walls in front of the so-called hemicycle, certain new facts concerning the whole group came to my notice. A more careful investigation led me to believe that the facts noticed might be of assistance in the solution of several of the problems connected with the construction and historical development of the group. These facts, therefore, with a few others which have been discovered in the course of the investigation, I desire to present briefly. As an aid in the discussion of the questions involved, it may be helpful to consider first the existing remains, noticing especially the materials used and the methods of construction employed in the structural body of the monument, or monuments, rather than the external decoration,

¹ The first part of the group discovered was the umbilicus, which was reported by Fea (*Prodomo*, 1816, p. 28) as seen in 1802. A part of the hemicycle and some traces of the rectangular structure were discovered in 1820-33; the principal part of the latter was not, however, seen until 1835 (*Annali dell' Istituto archeologico*, 1835, p. 64). Its identification with the rostra was first suggested by Tocco (*Ripristinazione del Foro Romano*, 1858, p. 20).

² The more important of the later publications on the subject are the following: Jordan, *Topographie der Stadt Rom*, I, 2, pp. 229 ff.; Richter, *Rekonstruktion und Geschichte der röm. Rednerbühne*, 1884, *Die röm. Rednerbühne*, *Jb. Arch. I.* 1889, pp. 1-18, *Beiträge zur röm. Topographie*, II (1903); Nichols, *Notizie dei Rostri del Foro Romano*, 1885; Hülsen, *Röm. Mitt.* 1899, p. 238, 1902, pp. 13-21, 1905, pp. 15-28; Petersen, *Comitium, Rostra, Grab des Romulus*, 1904, *Röm. Mitt.* 1906, pp. 57 ff.; Boni, *Atti del Congresso storico*, pp. 554 ff.; Mau, *Rostra Caesaris*, *Röm. Mitt.* 1905, pp. 230-266; Vaglieri, *Scavi recenti nel Foro Romano*, *B. Com. Rom.* pp. 152 ff.

which by its very nature is more likely to have undergone change at the hand of the restorer.

The group of remains, as now seen, consists of two principal parts, the rectangular structure (Fig. 1) of *opus quadratum* facing the Forum, to which the name of rostra is commonly restricted, and the semicircular platform toward the west, the so-called hemicycle. The former of these parts, the rectangular structure, is 23.75 m. (80 Roman feet) long and at



FIGURE 1. — THE FRONT OF THE ROSTRA IN 1902.

least 12.60 m. (40 + Roman feet) wide. The walls in front and on the sides are of *opus quadratum* made of blocks of reddish-brown tufa 60–63 cm. thick, 58–62 cm. wide, and, in general, from 1.20–2.20 m. long. The blocks,¹ between which are traces of a thin layer of mortar composed almost wholly of lime, are carefully bonded,² and held in place by numerous

¹ Of these blocks, four courses and a small portion of a fifth still remain at the northeast corner of the structure. The greater part of the front wall, as now seen, is a modern restoration (1904).

² The blocks are so laid that the lines of juncture do not come one above another.

clamps.¹ Beneath these walls of tufa is a course of travertine slabs 28–30 cm. thick and 1.35–1.40 m. wide. These slabs form a shelf on the outside of the wall 30 cm. wide and one on the inside 45 cm. wide. On the south side the travertine course rests upon a course of tufa of the same width and at least 55 cm. thick.² There was built on the north side and, so far as can be determined, on the front also, in place of this course of tufa blocks, a concrete wall 65 cm. high, which was faced on the inside with brick. Beneath this brick-faced wall, on the north side, there is a solid foundation at least 55 cm. deep,³ of the same concrete as that of the wall above it. It is probable that this foundation exists beneath the walls on the other side⁴ also, although it is impossible to determine this, since the lower part of these walls is at present wholly concealed.

On the outside of the structure are the remains of a white marble plinth 28–30 cm. wide and 30 cm. thick, which rested on the shelf formed by the projection of the travertine course mentioned above. For the reception of this plinth, a place 2–4 cm. deep was hollowed out (Fig. 2) in the travertine course below it, as well as in the tufa wall behind, to which it was firmly attached. Above the plinth was a moulding of white marble 21 cm. high, which was not only fastened to the plinth, but was attached also to the tufa blocks behind by metal clamps 20–25 cm. apart. The upper portion of the wall was covered by a marble facing, which was divided into panels by pilasters a metre apart. To this facing the bronze beaks were attached. Along almost the entire front of the structure

¹ The swallow-tailed clamps have disappeared, but the holes for them are still visible.

² Mau (*l.c.* p. 244, n. 1) has called attention to the error of Richter (*Rekonst. u. Gesch. der röm. Rednerbühne*, p. 12, n. 5), who gives the thickness of these blocks on the outside as 75 and on the inside as 29 cm.

³ A small part of this foundation is at present visible, though it is partially concealed by a thin layer of tufa slabs above it. Its depth below the level of the pavement adjoining it on the inside of the structure is at least 1.03 m., that is, 1.63 m. below the level of the Forum. See p. 175, n. 1, for the level of the Forum at this period.

⁴ No traces of this foundation are reported by Richter (*l.c.* p. 12) as found by him under the walls on the south. It is possible that it was omitted on that side, or that it escaped notice on account of the projection beyond it of the tufa slabs mentioned above.

the marble plinth is still preserved. The moulding also, though no longer in place, is traceable by the holes for the clamps¹ by which it was attached to the plinth and to the wall behind. On the north considerable portions of both plinth and moulding remain, though it is possible that toward the west they are no longer in their original position. On the south side a part of the plinth only is left. The spaces hollowed



FIGURE 2. — THE SOUTH WALL OF THE ROSTRA.

out for the reception of both plinth and moulding and the holes for the metal clamps still remain, however, to within 75 cm. of the end of the wall of *opus quadratum*.² Beyond this point no traces of clamps are to be found, and the spaces hollowed out in the travertine base and in the wall behind extend but 45 cm. farther.³ The significance of this fact will be noticed later.⁴ Of the marble facing by which the wall was covered, nothing remains. A number of pieces of the cornice, by which the façade was crowned, have been, however, discovered in

¹ A few of the metal clamps, both iron and bronze, are still preserved.

² See Figs. 2 and 7.

³ See Figs. 2 and 7.

⁴ P. 184.

the more recent excavations and restored to their original position.

The space enclosed between the walls of *opus quadratum* was bounded on the west by a solid wall¹ — or mass — of brick-faced concrete (Fig. 3), the east face of which was 9 m. from the front of the whole structure. A large part of this wall was destroyed later to the level of the pavement in front of it.²



FIGURE 3. — THE BRICK-FACED WALL INSIDE THE ROSTRA.

Adjoining the wall on the south, however, the concrete has been preserved to a height of 1.80 m., while a considerable fragment of the brick facing³ still remains near the same point. The extent of this mass of concrete toward the west is, in certain parts, difficult to determine. On the north it is not at present traceable beyond the front of the hemicycle, the façade of which rests upon it. For 5 m. beyond the point at which the façade now ends, however, it extends up to the concrete core of the hemicycle itself, of which it is structurally a part. Toward the south the width of the concrete is much less than at the

¹ See Fig. 3 and Hülsen, *Röm. Mitt.* 1902, pl. II.

² See Fig. 4.

³ See Fig. 3.

northern end of the structure. It varies also at the different levels. Below the level of the pavement inside,¹ its width is not more than 1.50-1.70 m. Above this point, however, it extends a metre farther towards the west. This difference, as well as the difference in the general width of the concrete at the ends of the building, is due to the presence on the south of the remains of an earlier structure, against and on top of which the later one has been built. Of this earlier structure, the existence of which has not before been recognized, I shall speak later.

In type of construction, this wall is identical with the foundation walls on the north and east, of which mention has been made above.² The concrete, of which the main body of the wall is composed, is of a fine quality. The mortar, which is of a deep red color, is made of loosely sifted red *pozzolana*³ and lime. While less friable than the mortar found in earlier structures, it lacks the flint-like quality characteristic of the later periods. The filling consists of pieces somewhat above the average size of the reddish-brown tufa of which the walls of *opus quadratum* are made. For 45 cm. from the front of the wall, bricks of the same type as those of the facing have been used as filling in place of the tufa. The facing of the wall is of the peculiar type found in the buildings of the early empire, in which the bricks used are made wholly from flanged roof-tiles.⁴ Apart from the fronts of the bricks, which are evenly sawed, it is plain that the material was used as it came to hand. No uniformity exists in the size or shape of the bricks, and not a single example⁵ is to be found of the triangular form so common later. The width of the courses is

¹ See Fig. 6. This pavement is 60 cm. below the bottom of the marble plinth outside, which may be assumed as approximately the level of the Forum at this period. The republican pavement in front of the so-called *rostra vetera* is 1.15-1.20 m. lower than the one just mentioned, that is, 1.75-1.80 m. below the level of the Forum.

² See p. 172.

³ The Latin name *pulvis Puteolanus* is applied by Vitruvius only to the special volcanic deposit found at Puteoli. The modern name, *pozzolana*, is, however, used also for the volcanic deposits near Rome, to which Vitruvius applies the more general term *arena* (*De Arch.* II, 4 *et al.*).

⁴ For the use of brick made from roof-tiles, see Vitruvius, *l.c.* II, 8, 19.

⁵ See Mau, *l.c.* p. 261, for a seeming exception to this statement. The sides of the brick referred to by him are, in my opinion, sawed and not moulded.

from 3.50 to 4.20 cm. The bricks themselves are magenta red in color and of flint-like hardness. The clay used in their composition is of good quality and the *pozzolana* is finely sifted and clean. The layers of mortar are from a half centimetre to a centimetre in width. In quality it does not differ, except in fineness, from that used in the concrete.

South of the centre of the structure are the remains of a



FIGURE 4. — THE FRONT OF THE HEMICYCLE.

cross-wall uniting the wall on the west with the nearest of the travertine posts. The purpose of this wall, which is of the same period as that just described, is not clear. The other brick-faced walls inside the building belong to a much later period.

The height of the structure above the travertine base is 3.60 m. The upper floor of the platform rested on travertine beams 60 cm. thick, which were supported by rows of travertine pillars. Of these pillars a number remain, though, with one exception, in a fragmentary condition.

The structure now seen in the rear of that just described, the so-called hemicycle,¹ consisted of a semicircular platform 2 m.

¹ See Fig. 4.

wide and of the same length, it has been held, as the rectangular structure. The curved front of this platform (Fig. 4) was decorated by a façade the upper part of which was composed of slabs of red (Porta Santa) marble separated by pilasters of *marmo Africano*; beneath this facing were a white marble plinth and moulding resting on a sub-plinth of travertine. Holes for the attachment, probably, of bronze ornaments are still to be



FIGURE 5.—THE WALL NORTH OF THE STEPS.

seen on the front of the colored marble slabs. A curved flight of steps, five in number, ascended to the platform from the west. These steps do not belong, as has been suggested,¹ to a later restoration, but were a part of the original building, for in a line with the bottom of several of the steps there is traceable in the concrete core of the structure a layer of marble clippings, marking the stages in the progress of the construction. Of the southern half of the steps, only a part of the concrete foundation has been preserved, while of the wall beyond them on the south no traces are left. The corresponding wall on the north was

¹ Richter, *Rekonst. u. Gesch. der röm. Rednerbühne*, pp. 17 f.; Mau, *l.c.* pp. 263 f.

also in large part destroyed later by the erection of the umbilicus. The lower part of it¹ (Fig. 5) has been preserved, however, for a distance of several metres. It is 60 cm. in width and is faced on both sides with brick. Of this facing, four courses are still left on the inside and twelve on the outside. Seven metres from the front of the hemicycle and three from the so-called altar of Vulcan, this wall is joined at right angles by a lower one of the same period, which may have belonged to a flight of steps² on the north of the original structure. A small portion only of the concrete core of this wall remains, with a few courses of the brick facing on one side. Both of these walls are identical in type of construction with those belonging to the rectangular structure in front.

The concrete foundation on which was built the hemicycle with the flight of steps in the rear belongs to two distinct periods.³ Resting immediately upon the pavement in front of the arches of the so-called *rostra vetera*, the remains⁴ are still to be seen of an early concrete structure 3.50 m. high, which differs essentially in type of construction from that in front and on top of it. Toward the east this concrete core extends, as has been said, to within a metre and a half of the front of the wall in the rear of the rectangular structure. On the west it was built against and, in all probability, on top of the republican arches just mentioned. Toward the north its extent cannot be determined, since it is now concealed beneath the later building. It is clearly traceable, however, for at least seven metres from the wall of *opus quadratum* on the south. Beyond this wall it extended originally at least six metres toward the south, since a small portion of it has been preserved on the farther side of the south wall of the Schola Xantha, underneath the foundations of which it can also be traced.

In type the concrete of this earlier structure differs but little from that of the arches against which it was built. The mortar,

¹ The bricks have been much loosened by exposure to the weather. The similarity in type of construction to the walls belonging to the rectangular structure is, therefore, less evident.

² See p. 185. On top of this wall in the rear of the umbilicus are the remains of a white marble slab, which may very well have formed one of these steps.

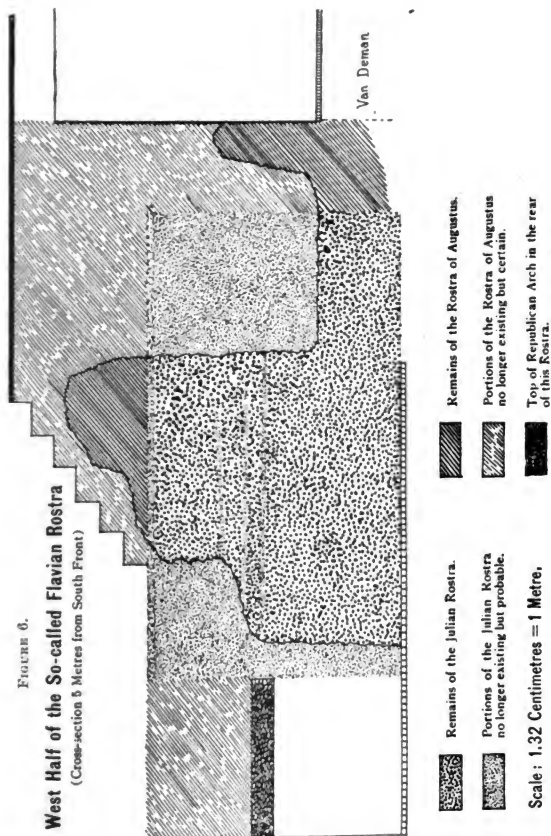
³ See Fig. 6.

⁴ See Figs. 6 and 7. (These remains are to be seen to the left of the tufa wall.)

FIGURE 6.

West Half of the So-called Flavian Rostra

(Cross-section 5 Metres from South Front)



which is ashy-gray in color, is composed of lime mixed with an inferior kind of *pozzolana*, in which very little red appears. Like that of the arches, it is very friable, crumbling easily into ash-like dust. The filling consists of pieces, varying much in size, of *cappellaccio*, light grayish-yellow tufa, and peperino, with only a small amount of reddish-brown tufa. Very little travertine and marble are found, and a few pieces only of pottery or brick. About 1.75 m. above the earlier pavement is a layer¹



FIGURE 7.—THE WEST END OF THE SOUTH WALL OF THE ROSTRA.

of white marble and travertine clippings. Above this there are two² other similar layers at intervals of 25–30 cm. apart. 3.30–3.50 m. above the pavement there is seen a wider layer.³ At this level, which is that of the bottom of the first of the steps in the rear,⁴ the concrete of the later period begins. Of this concrete, which is not only of the same type as that of the wall in the rear of the rectangular structure but a continuation of it, the

¹ For these layers, see Figs. 6 and 7.

² These layers are less clearly marked than the others.

³ See Figs. 6 and 7. (The upper one of the layers.)

⁴ See Fig. 6.

greater part of the hemicycle was made. On the south, owing to the presence of the earlier structure below and the partial destruction of the later one above it, but little of this concrete is now visible. The northern half of the building, which is well preserved, is, however, wholly composed of it.

At the north end of the hemicycle is a brick-faced conical structure of a later period, which is recognized by all as the umbilicus. This structure is united to the front of the hemicycle by a brick-faced wall, which is of the same period as the umbilicus and, like it, distinct in origin from the monument against which it was built. Corresponding to the umbilicus, at the south end of the hemicycle, stood originally, it is possible, the *milliarium aureum*. No traces of it, however, are now to be found at this point.

By the removal of the modern road in 1882, the greater part of the group of remains which we have just described became for the first time easily accessible. Of the many questions which have presented themselves anew for solution since that time, two have been recognized as of fundamental importance, namely, the relation of the two parts of the group to each other and the date, or dates, to be assigned to them. Concerning the first question three opinions have been held. The first of these, which was advanced by Jordan¹ in 1882, before the excavation of the lower part of the walls inside, was that the two parts were independent and the rectangular structure was the older. Later investigations have rendered the acceptance of this opinion impossible. In 1885 the work of Nichols² appeared, in which he accepted the independence of the two structures but maintained³ the priority of the hemicycle. A year before this time, Richter⁴ had advanced the view — since abandoned by him — that the two were originally parts of a single structure and that the hemicycle in its present form belonged to a later restoration. With the earlier view of Richter, which is that now held by

¹ *Topographie der Stadt Rom*, I, 2, pp. 242 et al.; *Annali dell' Istituto*, 1883, p. 23.

² *Notizie dei Rostri del Foro Romano*.

³ *L.c.* p. 41 et al. Professor Mau, in his recent careful treatment (*Rostra Caesaris, Röm. Mitt.* 1905, pp. 230-266), was substantially in agreement with the view of Nichols.

⁴ *L.c.* p. 13 et al.

Hülse,¹ I have been led by my examination of the remains themselves to agree. Of the reasons by which I have been brought to this conclusion, only the more important can be referred to here.

Between the two structures there exists an agreement in the use of materials and in methods of construction which make it practically certain that they belong at least to the same period. In two particulars this agreement is especially marked. As we have already noticed, the concrete of the rear wall of the rectangular structure, as well as of the foundation-walls on which those of *opus quadratum* rest, is identical in type with that of which the entire hemicycle is composed,² with the exception of the small portion on the north belonging to the earlier structure of which mention has been made. Again, the brick facing of the foundation-walls of the rectangular structure and of the wall in its rear, which is of a peculiar type found during a comparatively short period only,³ is the same as that of the walls on the north of the steps of the hemicycle. That these walls do not belong to a later restoration is certain, since the concrete of which the centre of the walls is composed is the same as that of the rest of the hemicycle. It is clear, therefore, from their agreement in type of construction, that the two structures are of the same period.

That they are, however, not only contemporaneous in origin but parts of a single structure is, in the first place, evident from their mutual dependence in architectural design and in practical purpose. This mutual dependence, which is recognizable in the coincidence in orientation of the various parts as well as in many minor details, is very clear, if either structure be regarded as an independent monument. Owing to the presence of the façade, no permanent steps can have existed originally in front or on either side of the rectangular structure. The approach to it, therefore, must have been from the rear. Not

¹ *Röm. Mitt.* 1902, p. 20; 1905, p. 20.

² The agreement between the two structures becomes more noticeable, if comparison be made with the adjoining buildings, in none of which this type of concrete appears.

³ The bricks are made wholly, as has been said, from flanged roof-tiles. While bricks of the same kind are found not infrequently in buildings of a later period, at no time are they used exclusively, except during the early empire.

only do the steps of the hemicycle furnish such an approach, but no traces of any other are to be found. The erection of the hemicycle as an independent structure is no less difficult to explain, owing to its peculiar form.¹ That this form is not the result of a later restoration of the steps in the rear, as has been suggested,² is certain, since the steps occupy their original position.

For the unity of the structures, however, we have, fortunately, other and more conclusive proofs. Of these, the most important is the impossibility of the existence of either part prior to the erection of the other. Concerning the rectangular structure the proof is simple. On the inside of the building there are, as we have seen, a number of brick-faced concrete walls of the earlier period, several of which serve as foundations for the structure itself. Since these brick-faced walls are of the same period as those which form a part of the northern end of the hemicycle, the structure resting upon them must be of the same period or later. The proofs concerning the hemicycle are no less conclusive. Its recognition as an independent monument depends almost wholly upon the existence of the curved façade, which forms its front. Since, however, this façade rests upon or is directly attached to³ the concrete of the rectangular structure, its existence, and in consequence the existence of the hemicycle itself, previous to the erection of that building is practically impossible. This is seen even more clearly, if the supposed point of juncture of the monuments on the south be considered. The point of juncture on the north, to which the attention of archaeologists⁴ has been almost exclusively directed, while it is of interest, affords no conclusive evidence concerning the structural body of the monuments, since either the parts which it is possible to examine belong wholly to the external decoration,⁵ or their original position is open to doubt.

¹ Hülsen (*Röm. Mitt.* 1905, p. 16) has called attention to this fact.

² Mau, *l.c.* pp. 263 f.

³ Traces are still left of the mortar of a later period by which the slabs of colored marble were attached to the concrete behind.

⁴ See, for example, Nichols, *l.c.* pp. 38 f.; Mau, *l.c.* pp. 231 ff.

⁵ The travertine course on which the outer wall of the rectangular structure rested was a structural part of it. It is not, however, certain that it is, at the present time, *in situ*.

On the south, on the other hand, the parts which remain are in large part structural, and are unquestionably *in situ*.

12.60 m. from the front, the wall of *opus quadratum*, forming the south side of the rectangular structure, ends abruptly (Fig. 7). That it did not extend originally beyond this point is clear, since the ends of the two blocks which remain are finished roughly,¹ as on the inside of the wall, and no traces are left of clamps for their attachment to other blocks farther to the west. The travertine course on which these blocks rest is also discontinued thirty centimetres from the end of the wall, while a short distance farther to the east all traces of the plinth and moulding disappear.² The assumed front of the hemicycle at this point is 13.60 m. from the front of the rectangular structure. Between the two buildings there exists, therefore, a space a metre in width, which would not have been left, had the hemicycle been standing when the wall was built. It is clear, then, that the hemicycle, as such, did not exist at that time. Since, therefore, neither of the structures can have existed before the other, and since their erection at the same time as independent monuments is not conceivable, we must assume that they were erected at the same time as parts of a single monument. That this assumption is correct is shown conclusively by the structural unity of the two parts, of which mention has been made above.³

In the architectural history of the monument four periods can be distinguished. Concerning the building belonging to the first of these periods, of which nothing remains except the mass of gray concrete on the south, little can be said with certainty. In extent and location it differed somewhat from the later structure, extending at least six metres farther toward the south, although on the north its extent was much less. Toward the east it can be traced to within a metre and a half of the front of the mass of concrete forming the back wall of the later rostra.⁴

¹ A few traces of mortar still adhere to the end of one of the blocks.

² The travertine foundation, on which the wall at this point rests, is continued a metre farther. (See Fig. 7.) Professor Mau (*l.c.* p. 237 and Fig. 6. Note that a part only of the last block is left) was led by this fact to assume the continuation also of the wall above it.

³ P. 175.

⁴ See p. 174 and Fig. 7.

Its extent toward the west is uncertain. Its height was at least 3.50 m.¹ above the pavement in front of the republican arches. Of its plan we know nothing, though it is probable that it resembled, in general, that of the building which took its place.

Of the later building, the main features of which are familiar to all, it is not necessary to speak at length. One point may, however, be worthy of mention. On the south of the monument, from the point at which the wall of *opus quadratum* and the façade along its front were discontinued, it is probable that a flight of steps or a ramp² was built, leading to the Clivus Capitolinus above. These steps were, however, destroyed within a short time by the erection of the Schola Xantha³ and the arch of Tiberius. It is probable that a corresponding flight of steps existed on the north of the building. To give more room, probably, for these steps, for a short distance from the rear of the rostra, the outer wall at both sides has been set back a little⁴ from the line of the wall toward the front. At the time of the restoration, in connection with which the hemicycle was built, many lesser changes took place in the building. There is no evidence, unless the cutting away of the core of concrete be considered as such, that the façade extended more than a metre beyond the middle of the structure. It is probable, from the presence of the remains of the brick-faced wall and of the concrete core, that a stairway ascended from this point to the platform above. At the time of the building of the umbilicus, the corner of the hemicycle was reduced to the condition in which it is now seen, and the travertine and marble pieces of the building in front were fitted against it. The rooms on the inside of the rostra belong wholly to the later periods.

Concerning the exact dates to be assigned to the various periods in the history of the building, a word only can be said. The mass of gray concrete on the south, which is all now remaining of the earlier building, is of a type but little removed

¹ See Figs. 6 and 7. (The upper layer of marble and travertine clippings.)

² See Hülsen-Carter, *The Roman Forum*, p. 76, Fig. 30:

³ The height of the Schola Xantha, which is but 2.30 m., and the depression of its pavement below the level of the Forum, suggest the presence of another monument on top of it. Concerning this I shall speak at another time.

⁴ The wall on the north is set back more than a metre.

from that found in republican buildings,¹ while it differs essentially from the concrete of the imperial periods. The structure by which it was replaced, on the other hand, belongs to the new era in construction—the era of the use of red *pozzolana*²—which began almost surely with the time of Augustus. To this period also the type of construction in general conforms. The exact date of the brick-faced walls on the inside and beside the steps on the west cannot at present be given. While it is certain that the type does not appear after the fire of Nero, the time of its first appearance is not yet fixed. It is the recognized type of facing in the time of Tiberius.³ Since Vitruvius, whose work must be assigned to the Augustan period, in his discussion of brickwork,⁴ recommends the use of a type of construction⁵ corresponding to this, its introduction in that period is very probable. We have the statement of Dion Cassius⁶ that the rostra was removed from its original position to that occupied by it at a later time by Julius Caesar. It is probable, therefore, that in the mass of gray concrete of the earlier structure, we have the long-sought Julian rostra. In the structure above, which is clearly a restoration and probably an enlargement of it, we must then recognize the *rostra Augusti* mentioned by Pomponius.⁷ We know that in 20 B.C. the *milliarium aureum* was dedicated by Augustus. It is possible that at the same time this restoration of the earlier rostra took place, to which no reference was made, on account of its dedication previously by Antony. The restoration in connection with which the hemicycle was made took place probably at the time of the building of the arch of Septimius Severus. The erection of the umbilicus, on account of its methods of construction, as well as of its relation to the hemicycle and to the neighboring arch,⁸ must be assigned to a still later period.

ESTHER BOISE VAN DEMAN.

ROME, March, 1909.

¹ Cf., for example, the arches against which the structure was built.

² This subject will be discussed fully at a later time.

³ The outer walls of the Praetorian camp are of this type.

⁴ *De Arch.* II, 8, 9 ff.

⁵ *L. c.* II, 8, 19. *Structura testacea.*

⁶ XLIII, 49.

⁷ *Dig.* I, 2, 2, 43.

⁸ See Richter, *l. c.* p. 38.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

WILLIAM N. BATES, *Editor*

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GENERAL AND MISCELLANEOUS

Emigration from the Lower Danube to the Caucasus in Prehistoric Times. — In *Mitt. Anth. Ges.* XXXVIII, 1908, pp. 136-171 (120 figs.), Dr. WILKE, of Grimma, discusses the intercourse between the Caucasus and the district about the lower Danube in prehistoric times. Many vases are, in form, color, and decoration, essentially the same in the two regions. The analogy is further supported by the bronze pins with ornamental heads, the spiral earrings, the sickles, the peculiar bronze figures with raised bands, and by the artificially elongated skulls found in both places. The pile dwellings form another point of resemblance. The writer concludes that about the middle of the second millennium B.C. an Aryan people, whom he would identify as Scythians, emigrated from the district about the lower Danube to the Caucasus, and in the course of a few centuries spread over Transcaucasia as far as the Araxes.

Painted Vases of the Stone Age in Bohemia. — In *Z. Ethn.* XL, 1908, pp. 573-575 (2 figs.), L. SCHNEIDER publishes evidence to show that local pottery with Mycenaean designs has been found in different parts of Bohemia.

La Tène, La-Tène, or Latène? — In *Röm.-Germ. Korrespondenzblatt*, I, 1908, p. 65, A. RIESE deplors the various spellings of Latène now in use and argues that the correct form is *Latène*.

The Origin of Religious Banquets. — In his *Till Fragen om Uppkomsten af Sakramental Måltider* (Upsala, 1908, Almqvist & Wiksells Boktryckeri-

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor BATES, Editor-in-charge, assisted by Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Mr. L. D. CASKEY, Miss EDITH H. HALL, Mr. HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor FRANK G. MOORE, Mr. CHARLES R. MOREY, Dr. JAMES M. PATON, Professor LEWIS B. PATON, Dr. A. S. PEASE, Professor S. B. PLATNER, Professor JOHN C. ROLFE, Dr. N. P. VLACHOS, and the Editors, especially Professor MARQUAND.

No attempt is made to include in this number of the JOURNAL material published after December 31, 1908.

For an explanation of the abbreviations, see pp. 123, 124.

A.-B. iv, 168 pp.), E. REUTERSKIÖLD discusses at length the religious banquet with special reference to totemism.

The Prices of Meat in Antiquity.—In *R. Stor. Ant.* XII, 1908, pp. 1-19, CORRADO BARBAGALLO discusses the prices of meats and fowls. He takes into consideration the material available from two sources only: Egyptian papyri and the *ισποροι* inscriptions from Delos. In forthcoming numbers the study will be continued.

The Cat in Antiquity.—The history of the domestic cat in antiquity forms the subject of a paper by O. KELLER in *Rom. Mitt.* XXIII, 1908, pp. 40-70 (12 figs.). He shows that it was not until the fifth century B.C. that the European Greeks had even a sporadic acquaintance with the Egyptian cat; that a short-lived attempt to acclimate the cat in Magna Graecia was made ca. 400 B.C.; that the Romans became acquainted with the sacred Egyptian animal ca. 100 B.C.; that house cats were rather rare in Italy in the first century A.D.; that in the second to the fifth centuries the weasel gradually lost his old-time position as a mouser in favor of the cat.

Nicopolis ad Istrum.—In *R. Arch.* XII, 1908, pp. 33-95, G. SEURE continues (see *A.J.A.* XII, pp. 212 and 352) his study of Nicopolis ad Istrum by the publication of 85 previously known inscriptions and the description of eight reliefs and seven bronzes. Indexes, lists of names, addenda, etc., are appended.

The Domed Tombs at Panticapaeum.—In *Jh. Oest. Arch.* I. X, 1908, pp. 230-242 (9 figs.), J. DURM discusses the three domed tombs at Panticapaeum. He examines their method of construction, and traces the architectural development of this type of tomb.

Two Arabian Inscriptions from Arabia-Petraea.—In *Z. Morgenl. Ges.* LXII, 1908, pp. 280-282, A. FISCHER discusses the text and translation of the two short Arabian inscriptions published by A. Musil in *Wiener Zeits. f. Kunde des Morgenl.* XXII, pp. 81-85.

North Arabian Inscriptions.—In *Eph. Sem. Ep.* II, 1908, pp. 345-378, M. LIDZBARSKI discusses the Safatenian and Thamudenic inscriptions in Northern Arabia that have recently been discovered by Dussaud and Macler, and also by Littmann and the American Archaeological Expedition. These inscriptions afford a good idea of the condition of the Arabs in Syria in Roman times and supplement in an important way Wellhausen's *Remains of Arabic Heathenism*. The Thamudenic inscriptions contain almost exclusively curses, and exhibit the greatest variety in invoking imprecations upon the enemies of the authors. In opposition to Littmann, Lidzbarski holds that the alphabetic signs found in these inscriptions are not the origin of the *usûm* or brands placed upon animals. He also contests Littmann's theory that the script of ancient North Arabia is the origin of the Berber writing. In opposition to Praetorius, he denies that the North Semitic alphabets form the intermediate stage of development between the Phoenician and the Sabaean alphabets. On the contrary, he thinks it more probable that both the North and South Semitic systems are independent developments of some early Greek system, perhaps the Cretan. The literature on the curious Mar'ulqais inscription in North Arabia is also made the subject of a thorough investigation.

South Arabian Inscriptions.—In *Eph. Sem. Ep.* II, 1908, pp. 379-400, M. LIDZBARSKI collects all the South Arabian inscriptions that have been

published within the last two or three years. There are twenty inscriptions in all; one is interesting as mentioning the North Arabian goddess Al-'Uzzā. The ancient Ethiopic inscriptions brought back by Littmann and Krenke from Abyssinia are also reported.

South Arabian Art.—In *Or. Lit.* XI, 1908, cols. 269-274 (pl.), M. HARTMANN discusses the motives of heads of bullocks, goats, and grapevines that are common in South Arabian art. These he holds are not derived from Mesopotamia, but were either learned by Yemenites in Syria, or were copied from Syrian patterns brought to Arabia.

Experiments with Ancient Lamps.—In *C. R. Acad. Insc.* 1908, pp. 480-487, M. RINGELMANN publishes the results of his experiments in the use of ancient lamps. The three lamps employed were Punic, dating from the seventh, sixth, and fourth to second centuries B.C. The oil was local olive oil. Wicks of pith, of hairs of the goat, the sheep, and the dromedary, and of threads of linen were tried. The last mentioned were found to be the only good wicks, but they must be small to avoid smoke. The best results were obtained with a wick 3 to 4 mm. in diameter and with salt in the oil. A better flame and less smoke was obtained with the use of salt. A wick 3 mm. in diameter, made of twelve threads of linen, with salt in the oil gives a flame 30 to 35 mm. high and 6 to 8 mm. thick. This flame is without smoke, but there is some odor, which was probably avoided in antiquity by the use of perfume. Eight grammes of oil are consumed by such a wick in an hour.

The Temple of Angkor-Vat.—In *Le Musée*, V, 1908, pp. 205-213 (6 figs.), H. LA NAVE describes the temple of Angkor-Vat, 4 km. south of Angkor, Siam. There are many monuments of the Kmers still to be seen in this vicinity, dating from the sixth to the twelfth century A.D., but this temple, though in ruins, is the most imposing. It is rectangular, with three spacious galleries superposed, surrounding a pyramid 74 m. high. The exterior is covered with delicate architectural decoration. The friezes on the flat surfaces are inlaid, those on the curved surfaces cut in relief. Inside decorations in gold and colors covered the walls and ceilings. The galleries of the lowest story are adorned with reliefs. In the western corridor the subject was taken from the *Ramayana* and represents the battle between the followers of Vishnu and those of Ravana. In the south corridor are warriors marching through a forest; in the north are battle scenes; and in the east a number of pleasure boats, and further on, the kingdom of the waters filled with fantastic marine animals. The original colors have largely perished.

EGYPT

Early Egyptian Chronology.—In *Klio*, VIII, 1908, pp. 213-226, C. F. LEHMANN-HAUPT discusses in detail the evidence for the chronology of ancient Egypt. He believes that the early Egyptians had a lunar year which they afterwards tried to reconcile with the solar year. The earliest Sothis period began July 19, 4236 B.C.

The Titles of the Thinite Kings.—In *S. Bibl. Arch.* XXX, 1908, pp. 86-94, 121-128, 163-177 (9 pls.), F. LEGGE shows that the protocol, or list of official titles of the Thinite kings, is connected in an uninterrupted manner with the protocol used by all succeeding dynasties, and that it can be

traced back by regular steps to the totems of the invading clans. From this he concludes that the form of a king's protocol is a valuable help in determining his place in the kings' lists, and one perhaps more trustworthy than those hitherto employed. This use furnishes a proof that Aha cannot possibly be the same as Menes.

The Hyksos and the Twelfth Dynasty.—In *S. Bibl. Arch.* XXX, 1908, pp. 155-158, E. W. HOLLINGWORTH attempts to show from the data of the monuments, the known lists of kings, the general evidence of the monuments, the features of the statues, and the similarity of the facts recorded of the two dynasties, that the Hyksos were identical with the kings of the twelfth dynasty.

Hieroglyphic and Hieratic Graffiti from Hatnub.—In *Sitzb. Berl. Akad.* 1908, pp. 679-690 (4 figs.), G. MÖLLER records the copying of graffiti at the alabaster quarries of Hatnub. Some of these had been previously published by Blackden and Fraser and by Griffith. There are in all seventeen hieroglyphic and fifty-two hieratic inscriptions. The former date from the fourth to the tenth dynasty, the latter from the sixth to the twelfth. The hieratic inscriptions of the tenth and eleventh dynasties are palaeographically nearer to those of the sixth than to those of the twelfth dynasty, a fact which may aid in determining the length of time between the sixth dynasty and the twelfth. These graffiti contain considerable information concerning the families of the rulers of the nome and their relations to the kings. The quarries and the road to the smaller quarry are described.

The Geography of the Tell el-Amarna Letters.—In *R. Bibl.* V, 1908, pp. 500-519, R. F. DORME summarizes the results of the most recent German investigations in regard to the location of the lands and cities mentioned in the Tell el-Amarna letters.

Synchronisms of the Tell el-Amarna Period.—In *Or. Lit.* XI, 1908, cols. 445-448, F. THUREAU-DANGIN exhibits in tabular form the synchronisms that are known to exist between Egyptian kings of the eighteenth dynasty, Babylonian kings of the third dynasty, and the kings of Assyria.

Sculptors' Models.—In *Ber. Kunsts.* XXX, 1908, cols. 39-44 (9 figs.), H. RANKE describes certain sculptors' models and explains the technical process of carving statues in ancient Egypt.

The Horns of Consecration in Egypt.—In *Annals of Archaeology and Anthropology*, I, 1908, pp. 24-29 (15 figs.), P. E. NEWBERRY points out that one of the cult objects at the masthead of boats in prehistoric Egypt is a two, three, four, or five crested mountain. In hieroglyphic inscriptions this is raised on a sacred perch and is sometimes two, but more often three, crested. It is the sign for the god Ha, an ancient divinity who seems to have been looked upon as a foreign god. An inscription of the twenty-sixth dynasty speaks of a certain Amasis as priest of "Ha of the double axe." The writer argues that this sign is to be identified with the horns of consecration found in Crete, with which the double axe was associated. They are emblematic of an ancient mountain god with whom the historic Zeus early became blended. He also suggests that the pillar in Minoan cult scenes may be equivalent to the prehistoric mast in Egypt.

Divinities on Scarabs.—In *Rend. Acc. Lincei*, XVII, 1908, pp. 135-155, ALICE GRENFELL discusses the divinities and animals found on scarabs, scaraboids, plaques, and amulets. These do not appear in the most ancient

specimens, but the former make their appearance during the dominion of the Hyksos, and the latter in the eighteenth dynasty. Until the sixteenth dynasty Egyptian deities appear, and a great variety of animals. These are fully discussed under various heads with numerous illustrations.

The War Helmet of the Pharaohs.—In *Or. Lit.* XI, 1908, cols. 236-237, W. M. MÜLLER shows that the name of the war helmet of the Pharaohs of the new empire, *hprš*, is not of Egyptian origin, but is the equivalent of the Hebrew word *hpr-r's*, meaning 'head covering.' This helmet is not depicted in Asiatic monuments, and its origin is still a puzzle.

The Pretended Egyptian Account of the Circumnavigation of Africa.—In *Sitzb. Berl. Akad.* 1908, pp. 956-967, A. ERMAN and H. SCHAFER discuss two scarabs on which are hieroglyphic inscriptions purporting to be records of the circumnavigation of Africa. These are shown, on linguistic and other grounds, to be forgeries.

A Temple of Apollo in Graeco-Roman Egypt.—In *Klio*, VIII, 1908, pp. 427-439 (pl.), P. M. MEYER publishes a papyrus now in Giessen dated in the year 80-79 B.C. and referring to the establishment of a temple of Apollo in that year at Hermoupolis. A temple of Apollo is known to have existed at this place as late as the fourth century A.D.

The Mention of Israel in the Merneptah Hymn.—In *Or. Lit.* XI, 1908, cols. 403-405, W. SPIEGELBERG holds that the signs commonly regarded as a determinative after the name of Israel in the famous passage in the inscription of Merneptah, cannot properly be regarded as a determinative, but must be read as an independent word *rmt*, "men"; and that the line must be translated, "Israel—its inhabitants are destroyed and its grain exists no longer." This indicates that Israel is the name of a land, and that its people are regarded as a settled agricultural population, which, according to the context, must have been located in Palestine.

The Jewish Colony and Temple at Assuan.—In *Bibl. World*, XXXI, 1908, pp. 448-459, J. M. P. SMITH gathers up the results of the investigations that have lately been published in regard to the Aramaic papyri of Assuan and the history of the Jewish colony at that place as it is derived from these documents. He also discusses the bearing of the new discoveries upon modern critical theories in regard to the development of the Hexateuch.

The New Papyri from Elephantine.—In *R. Bibl.* V, 1908, pp. 325-349, F. M. LAGRANGE summarizes the most recent discussions in regard to the Elephantine Papyrus containing the memorial of the Jews to the Persian governor concerning the destruction of their temple.

An Aramaic Ostrakon from Elephantine.—In *S. Bibl. Arch.* XXX, 1908, pp. 39-41, A. H. SAYCE, in the light of the Assuan papyri, attempts a translation of the ostrakon published by Cowley in *S. Bibl. Arch.* 1903, p. 264. It comes from the same Jewish community whose letter to the Persian governor of Judaea has lately cast such unexpected light on the books of Ezra and Nehemiah. It is a message sent by the hand of a slave to a friend of the writer.

Egyptian Analogies to the Finding of Deuteronomy.—The much discussed subject whether the finding of Deuteronomy has any counterpart in the finding of the records deposited in the foundations of Egyptian temples (see *A.J.A.* XII, p. 213) receives a fresh discussion from J. HERR-

MANN in *Z. Alttest. Wiss.* XXVIII, 1908, pp. 291-302, with the conclusion that the Dendera inscriptions are the most important parallels for the Old Testament student, but that the value of the analogy in the case of Deuteronomy remains doubtful.

A Pre-Macedonian Mint in Egypt?—J. MAVROCORDATO argues for the possibility of a pre-Macedonian mint in Egypt, on the basis of two silver coins described by him, struck probably between 390 and 350 B.C., with types characteristic of contemporary Athenian money, but bearing in addition symbols peculiar to Egypt (*Num. Chron.* 1908, pp. 197-207).

The Aboukir Treasure.—H. DRESSEL vigorously combats in *Z. Num.* XXVII, 1908, 137-157 (figs.), the denial of the genuineness of the gold medallions found (?) at Aboukir in 1902, which G. DATTARI set forth in *I venti medaglioni d' Abukir*, Milano, 1908 (see other articles noticed in *A.J.A.* VIII, p. 468; XI, pp. 78, 451; XII, p. 214).

The Copper Coinage of the Ptolemies.—In *Annals of Archaeology and Anthropology*, I, 1908, pp. 30-40, J. G. MILNE shows that down to about 200 B.C. the Ptolemaic copper coins conformed to the standard of the silver drachma; but that after that date the values were expressed in multiples of the copper drachma. The latter was not regarded as a coin, but as a mere unit of accounting with rates of exchange varying from 500:1 to 375:1 as compared with silver. The smallest coin had the value of five copper drachmae.

Lathemarks on Ptolemaic Bronzes.—G. DATTARI thinks that the small depressions often seen near the centre of the faces of Ptolemaic bronzes are due to the lathe used to finish the cast flaws, and served to guarantee the genuineness of the coins, being difficult of imitation by counterfeiters (*R. Ital. Num.* XXI, 1908, pp. 157-166; pl.).

BABYLONIA, ASSYRIA, AND PERSIA

Babylonian Chronology.—In *Mitt. Vorderas. Ges.* XIII, 1908, pp. 1-97, T. SCHNABEL undertakes to gather up all the new material that has come to light in the course of the last few years on the subject of the Babylonian and Assyrian chronology from 1600 B.C. onward. The material is arranged in the form of a commentary on the Babylonian list of kings known as List A. The two main problems discussed are, the place of Kurigalzu in the third dynasty, and the correctness of the chronological datum of the Bavian inscription that has been called in question by Lehmann and Rost. Schnabel holds that the correct order of the kings of the Tell el-Amarna period is Karaindash II, Kadashmanharbe II, Nazibugash, Kurigalzu II, and Burnaburiash II. The Bavian inscription he regards as trustworthy, and thinks that the suspicion cast upon it by Lehmann rests upon incorrect data.

The Ancient Sargon.—In *Or. Lit.* XI, 1908, cols. 313-315, F. THUREAU-DANGIN discusses a fragment of a stele which mentions a king *Sharru-GI*. As Sheil has already observed, this king must be distinguished from *Shar-Gani-Sharri*, who has hitherto been identified with the ancient Sargon, the father of Naram-Sin. The question then arises, with which of these two kings the ancient Sargon of tradition is to be identified. Sheil holds that *Sharru-GI* was the father of Naram-Sin, but Thureau-Dangin maintains that he was an earlier king of the dynasty of Kish, and that the correct order of

the kings is, Sharru-GI, Manishtusu, and Urumuush; Shar-Gani-Sharri and Naram-Sin. In *S. Bibl. Arch.* XXX, 1908, pp. 238-242, L. W. KING discusses the same problem and reaches the conclusion that tradition has confused these two monarchs and has ascribed the achievements of *Sharru-GI*, king of Kish, to *Sharru-Gani-Sharri*, the father of Naram-Sin. (See also HALÉVY in *R. Scm.* XVI, 1908, pp. 377-381.)

Babylonian Legal Documents.—In *Sitzb. d. Kais. Akad. d. Wissenschaften in Wien*, Phil.-hist. Klasse, 155 bd., 2 Abh., 210 pp. (Vienna, 1907). M. SCHÖRR transcribes, translates, and discusses the legal documents of the time of the first Babylonian dynasty, which were published in the British Museum *Cuneiform Texts*, Vols. II, IV, VI, and VIII.

Hammurabi.—In *R. Bibl.* V, 1908, pp. 205-226, F. P. DHORME gathers up the results of the most recent German and English investigations in regard to the identity of Hammurabi with Amraphel of Genesis xiv, and in regard to the identity of the other kings who are said to have fought with Amraphel. In *Z. Assy.* XXII, 1908, pp. 7-13, A. UNGNAD discusses the numerous ways of spelling the name *Hammurabi*, and comes to the conclusion that the correct spelling was *Ammurapi*, which makes the comparison with *Amraphel* of Genesis xiv all the more probable. Amraphel's ally *Arioch* is certainly Hammurabi's contemporary, *Eri-Aku*, as the name should be read in Sumerian instead of the ordinary Semitic reading *Warad-Sin*. In *Alt. Or.* IX, Pt. I, 1907, pp. 1-35 (3 figs.), F. ULMER gives a sketch of Babylonia in the time of Hammurabi. It begins with the sources of information, then takes up the Sumerians and the history of Babylonia before the time of Hammurabi. This is followed with a discussion of the political relations and national activities, war and the military organization, family and social institutions, commerce, trade, industry, art, law and jurisprudence, government, administration, schools, science, cosmology, calendar, religion, hymns and psalms, ceremonial popular religion, priests, ceremonies connected with death, and conceptions of the future life.

The First Year of Samsu-iluna.—In *S. Bibl. Arch.* XXX, 1908, pp. 70-71, C. H. W. JOHNS discusses the official title of the first year of Samsu-iluna in the Babylonian chronicles. It bore the name, "The year when Samsu-iluna, the King, at the sure word of Marduk extended his dominion over the lands." This seems to indicate that the closing years of Hammurabi's reign were clouded in some disaster, and that Samsu-iluna had to fight for his throne. This may be the secret of the difference between the date lists and the kings' list. The former give Hammurabi forty-three years; the latter, fifty-five. If there was an interregnum of twelve years, during which Samsu-iluna had no acknowledged supremacy, this would account for the discrepancy.

Kurigalzu and Burnaburiash.—In *Or. Lit.* XI, 1908, cols. 265-276, F. THUREAU-DANGIN discusses the problem of the order of the kings of Babylon who are mentioned in the Tell el-Amarna letters. Burnaburiash calls himself the son of Kurigalzu, but this does not necessarily involve that Kurigalzu was his own father. He may have been a grandfather, or remoter ancestor. This hypothesis furnishes a simple solution of the chronological problem of the kings of the Tell el-Amarna period. These are to be arranged in the order Karadash I, Kadashmanharbe I, Kurigalzu I, Kadashmanenlil I, and Burnaburiash.

Berosus in the Light of Newly Discovered Cuneiform Inscriptions.—In *Klio*, VIII, 1908, pp. 227-251, C. F. LEHMANN-HAUPT examines in detail the lists of kings given by Berosus and calls attention to the light shed upon them by the cuneiform inscriptions found in recent years.

The Arms Carried by Chaldaean Kings.—In *C. R. Acad. Insc.* 1908, pp. 415-422 (8 figs.), L. HEUZEY discusses the arms held by certain Chaldaean kings, especially those of Eannadu. The lance was used for striking as it is by the Arabs to-day; that is, it was allowed to slip through the hand until the end was reached, when it was firmly grasped. The peculiar club was originally provided with one or more blades of obsidian, making a very effective weapon.

The Sumerian Question.—In *R. Sem.* XVI, 1908, pp. 302-338, J. HALÉVY continues his discussion of the Sumerian question begun in previous numbers of the *Revue*, and defends his position that the Sumerian never existed as a language, but is simply an esoteric, priestly method of writing Semitic.

A Lament to Enlil.—In *Babyloniaca*, II, pp. 275-281, S. LANGDON translates an ancient Sumerian lament on the destruction of Nippur published in *Cuneiform Texts*, XV, 13. This was a favorite psalm in later compilations, and it is possible to trace its development and expansion through a number of recensions. The process throws an interesting light on the growth of psalms in the Hebrew psalter.

The Legend of Merodach.—In *S. Bibl. Arch.* XXX, 1908, pp. 53-62, 77-85, T. G. PINCHES calls attention to a tablet which amplifies an idea, already suggested in the creation narrative, of Marduk as the redeemer of the imprisoned gods whom he had vanquished. In this tablet Marduk's descent to Hades and visit to the spirits in prison, to whom he showed mercy and whom he delivered from their bonds, is described at considerable length. The passage has an interesting bearing on the Christian doctrine of the spirits in prison.

The God NIN-IB.—In *R. Sem.* XVI, 1908, pp. 339-354, 455-465, F. HROZNÝ accepts Clay's discovery that the ideogram *NIN-IB* is transcribed in Aramaic with the consonants *nest*. This he holds should not be read as Clay reads it, *En-Mashtu*, "Lord of the Amorites," but should be read *En-nammashti*, meaning "Lord of the Creatures."

Nin Harsag and Hâthor.—In *Or. Lit.* XI, 1908, cols. 234-236, A. BOISSIER calls attention to the correspondence of the Babylonian goddess Nin Harsag with the Egyptian goddess Hâthor in that they are both goddesses of mountains and both are conceived under the form of a cow.

The Name Yahweh in Babylonia.—In *Z. Assyriol.* XIII, 1908, pp. 125-136, S. DAICHES refutes the evidence that is supposed to indicate worship of the god Yahweh in ancient Babylonia, and comes to the conclusion that none of the facts thus far adduced show knowledge of this divine name. In the new Babylonian period all the names ending with *Yaama* did not represent *Yahweh* or *Yaho*, but only the syllable *yah*. The tetragrammaton occurs in the new Babylonian period no more than in the old Babylonian period.

A Liver Omen from the Time of Ammisaduga.—In *Babyloniaca*, II, pp. 257-274, A. UNGNAD publishes an omen derived from the inspection of a liver, that is of especial interest because it is the first complete liver omen

that has yet been discovered from the time of the first dynasty of Babylon. It describes the process by which the omen was obtained, and is dated in the 21st of Adar in the 10th year of Ammisaduga, which was probably the beginning of the year 1974 B.C.

The Sign and Name for Planet in Babylonian.—In the *Proceedings of the American Philosophical Society* (Philadelphia), XLVII, 1908, pp. 141-156, MORRIS JASTROW, JR., discusses the name (*bibbu*) and the ideographic designation (*Lu-Bat*) for planet in Babylonian. *Lu* he interprets as "sheep." *Bat* he interprets as "dead." The sheep, as a sacrifice, was of especial importance in divination, as were also the planets. The designation of the sacrificed sheep was then used to signify "omen," and in this sense was transferred to the planets, more especially to Mercury and Saturn. Divination by means of planets is less early and primitive than that by means of sacrifices (especially by means of the liver of the sacrifice). The relation between divination by the liver and by the stars is discussed. Previous discussions of divination by the liver by the same author are 'An Omen School Text' in *Old Testament and Semitic Studies in Memory of William Rainey Harper*, University of Chicago Press, 1908, 'The Liver in Babylonian Divination,' in *Medical Notes and Queries* (Philadelphia), November, 1907, pp. 237-240, and 'The Liver in Antiquity and the Beginnings of Anatomy,' in *University of Pennsylvania Medical Bulletin*, January, 1908, pp. 238-245. These are briefly discussed by S. REINACH, *R. Arch.* XI, 1908, pp. 417 f.

The Star Dil-Bat.—In *Z. Assy.* XIII, 1908, pp. 155-165, M. JASTROW, JR., agrees with the conclusions of Kugler that the planets are to be identified with the great gods of Babylonia as follows: Jupiter = Marduk, Venus = Ishtar, Saturn = Ninib, Mercury = Nebo, Mars = Nergal. These identifications he holds did not change from the earliest to the latest times. In the case of Venus (*Dil-Bat*), he shows that this planet was never associated with any other deity than Ishtar. Supposed instances to the contrary rest upon a misunderstanding of the texts.

The Land of Muṣri.—In *Or. Lit.* XI, 1908, cols. 218-220, W. M. MÜLLER claims that the animals depicted on the obelisk of Shalmaneser II as coming from the land of Muṣri, represent an impossible combination of creatures from diverse lands, from which nothing can be inferred as to the location of Muṣri. Two of the animals are found in Egypt. This is the only historical kernel in the representation.

Babylonian Calendar.—In *Z. Assy.* XIII, 1908, pp. 63-78, F. X. KUGLER discusses the proper interpretation of certain standing formulas in the official titles of the years in old Babylonian chronological lists. He also reaches the conclusion that nothing was known of a regular intercalation of an extra month every nineteen years in early Babylonia. The leap-years known to us follow no regular plan, and it must be assumed that extra months were inserted arbitrarily in accordance with the ripening of the crops.

The Length of the Month in Babylonia.—In *S. Bibl. Arch.* XXX, 1908, pp. 221-230, C. H. W. JOHNS discusses a number of contract-tablets which give sum totals of the number of days between a given day in one month and a day in a succeeding month. From these he shows that the month Tammuz had 30 days; Ab, Elul, and Tesri each 29; Marchesvan 30, Chislew 29, Tebet 30, and Adar 30.

Babylonian Boundary Stones.—In *Z. Assyr.* XIII, 1908, pp. 98–124, C. FRANK discusses the boundary stones recently published by W. J. Hinke (see *A.J.A.* XII, p. 356) and adds a number of suggestions in regard to their interpretation and archaeological significance.

Assyro-Babylonian Weights.—In *J. Asiat.* XI, 1908, pp. 191–202, J. A. DECOURDEMANCHE seeks to supplement the material in regard to Babylonian, Assyrian, and Persian weights, gathered by F. H. Weissbach in *Z. Morgenl. Ges.*, June, 1907, by collecting also the data furnished on the subject of weights and measures by the Greek metrologists of the Alexandrian school, with the aim of discovering, if possible, by a comparison of their statements with the Babylonian data, the basis of the ancient Oriental system of weights and measures.

An Assyrian Incantation against Rheumatism.—In *S. Bibl. Arch.* XXX, 1908, pp. 63–69; 145–152, R. C. THOMPSON gives in transcription and transliteration with a commentary an Assyrian magical formula for the curing of rheumatism.

The Behistun Inscription of King Darius.—An annotated translation of the Behistun inscription of Darius, by H. C. TOLMAN, forms Vol. I, No. 1, of *Vanderbilt University Studies*. (Nashville, Tenn.; New York, Lenicke and Buechner; Leipzig, O. Harrassowitz; 39 pp.; \$0.50.)

Chronology of the Behistun Inscription.—In *Or. Lit.* XI, 1908, cols. 485–491, F. H. WEISSBACH discusses the order of events as narrated in the Bisutun Inscription, or, as it is commonly called, the Behistun Inscription of Darius.

The Zagros Mountains.—In *Alt. Or.* IX, Pt. 3–4, pp. 1–66 (3 plans; 35 figs.), G. HÜSING discusses the archaeology and ethnology of the Zagros mountain region. Following the caravan route from Mosul to Hamadan, he describes the rock sculptures, first at the western end of this route at Bisutun and its neighborhood, then at the eastern end in the neighborhood of Hamadan. He then describes the physical features and the archaeology of the northern Zagros region, and afterwards of the southern Zagros, concluding with the remains in the vicinity of Dizful. This is followed with a sketch of the ethnology of the region. The earliest population seems to have been of the Negrito type. This was succeeded by an eastern race known as the Halla, that is divided into two main groups, the Lulubi in the west, and the Kasyapa in the east. These were followed by the Halappi, who were akin to the population of Elam. In the time of Sargon we first meet the Iranians, Persians, and Medes settled in this region. At the present time the northern part is inhabited by races speaking Kurdish, the southern part by races speaking Luri.

SYRIA AND PALESTINE

The Chronological Systems in the Old Testament and in Josephus.—In *Mitt. Vorderl. Ges.* XIII, 1908, pp. 101–176, A. BOSSE investigates the chronological data found in the Old Testament, with the conclusion that the Massoretic figures represent a more self-consistent and original form of the text than either the Greek or the Samaritan recensions. The fundamental conception of this chronology is the recognition of astronomical cycles, such as are known to have existed among the Babylonians. The main eras are

found to correspond with great sun-years, great moon-years, and Sirius-cycles. The whole system rests upon astronomical chronological speculation rather than upon authentic tradition.

Sacred Stones and Cup-marks in Palestine.—In *Z. Alttest. Wiss.* XXVIII, 1908, pp. 271-290, H. H. SPOER discusses the meaning of the cup-marks that are found so frequently in Palestine, and their relations to the holy stones with which they are often associated. Some cup-marks in the vicinity of cisterns and wells were doubtless used for watering animals. Other cup-marks on dolmens and menhirs, or on the vertical sides of cliffs, cannot have served a utilitarian purpose. Their frequent association with dolmens and menhirs suggests that they have a religious significance. A list is given of twenty dolmens with which cup-marks are associated. A cup seems to have been excavated in the rock in front of a dolmen to receive the blood of the victim that was slain upon the dolmen as an altar. Subsequently the cups were placed on the upper surface of the dolmen. Graves that contain similar cup-marks were also places of sacrifice like the dolmens. Cup-marks placed on the upper surface of standing stones may have served a similar sacrificial purpose. When they are placed on the sides of such stones they are more probably emblems of the Semitic mother-goddess 'Ashtart. While they are found on the tall standing stones that seem to have been emblems of the Baals, they are not found on the smaller cone-shaped stones that are emblems of the 'Ashtarts. In the light of these phenomena we should probably explain the cup-marks on vertical rocks as 'Ashtart emblems. So probably the cup-marks in the high place at Gezer are to be interpreted.

Ancient Jewish Synagogues in Galilee.—In *Bibl. World*, XXXII, 1908, pp. 87-102, E. W. G. MASTERMAN describes the ancient Jewish synagogues found at Tell-Hum, Kerazeh, Irbid, Umm el 'Amed, Kefr Ber'im, Meron, el-Jish, Nebratain, and ed-Dikkeh. All these buildings he regards as dating from the second or third centuries of the Christian era. They cannot be earlier than the ruins of Baalbec. The remains are rapidly disappearing, being used as quarries for building-materials by the villagers in the neighborhood.

Jerusalem in Bible Times.—Under the title *Jerusalem in Bible Times* (Chicago, 1908, University Press, 169 pp.; 56 figs.; 10 plans) L. B. PATON publishes a useful account of Jerusalem, its geography, and its existing remains. He discusses the condition of the city in earliest times and the successive changes it underwent down to the time of its capture and destruction under Titus.

The Third Wall of Jerusalem.—In *R. Bibl.* V, 1908, pp. 182-204, 367-381, H. VINCENT discusses the course of the third wall of Jerusalem in opposition to the views advanced by L. B. Paton in *Bibl. World*, 1907, and in *Jerusalem in Bible Times*. He holds that the statements of Josephus and other ancient writers in regard to the size of the city and the distance between the walls are untrustworthy, and that the only safe course for archaeology is to adhere to mediaeval ecclesiastical tradition in regard to the location of the Holy Sepulchre.

Herod's Temple.—In *Exp. Times*, XX, 1908, pp. 24-27, 66-69, A. R. S. KENNEDY attempts a more exact determination of the length of the cubit used in the building of Herod's Temple. From measurements of a large number of stones in the Harem Area and in other early Jewish monuments,

he concludes that the Herodian Temple was built according to a cubit that measured 17.6 inches. By the application of this standard, by a more critical examination of the data of Josephus and of the Mishna, and by a careful study of the rock levels of the Haram Area and of the remains of Herod's work that still survive, he seeks to determine the precise location of the Temple and its various enclosing courts and walls, together with the gates and the bridge across the Tyropoean Valley.

Petra and its Rock Sanctuaries.—In his *Petra und seine Felsheiligtümer* (Leipzig, 1908, J. C. Hinrichs'sche Buchh.; v, 364 pp.; map; 332 figs.; M. 28) G. DALMAN publishes a thorough study of the rock sanctuaries at Petra as a result of four visits to the site. An introduction of about one hundred pages describes the situation and history of Petra, the religion of the Nabataeans, the character of the holy places and the objects found in them, the inscriptions, etc., and this is followed by a detailed account of thirty sanctuaries with plans.

A Journey to Jerash.—In *Scribner's Magazine*, XLIV, 1908, pp. 405-418 (8 figs.), HENRY VAN DYKE describes his visit to Jerash, the ancient Gerasa. He gives a brief account of the ruins of the forum, of two theatres, of the propylaeum, and of the temple of the Sun.

The Latest Coins of Antioch.—In *M. Soc. Ant. Fr.* LXVII, 1907, pp. 246-267 (5 figs.), A. DIEUDONNÉ points out that although the issue of autonomous coins at Antioch came to an end under Valerian, two small bronze coins were struck after that time. These are discussed at length and the conclusion reached that they date from about 305 A.D. The first of them was probably struck by Galerius and the second by Maximinus. Eckhel and Cohen are wrong in attributing them to Julian the Apostate.

Coin Bearing the Name Yahweh.—In *S. Bibl. Arch.* XXX, 1908, pp. 45-52 (2 pls.), E. J. PILCHER discusses a unique coin from Gaza that has been in the British Museum's collection since 1814. On the obverse it bears a male head with crested Corinthian helmet. On the reverse in a square enclosure is the figure of a god, holding an eagle in his left hand, with three Phoenician letters *YHW* above his head. This is the same spelling of the divine name that is found for the Hebrew God *Yahweh* in the Aramaic papyri of Elephantine, and there can be no doubt that the deity in question is meant to be Yahweh, who is here identified with Zeus. The peculiar feature of this figure is a winged wheel. This is foreign to Greek art, but suggests the description of the chariot of Yahweh in the Book of Ezekiel.

The Aryan Origin of Jesus.—In *Or. Lit.* XI, cols. 237-240, P. HAUPT maintains that the Hamath conquered by Tiglath Pileser III and settled with Assyrian colonists was not, as is commonly supposed, the well-known Hamath of northern Syria, but was situated in Galilee. The colonists who were settled here were Aryans brought from Media. From these colonists the later population of Galilee was descended. They were Jews in religion, but not in race. Hence, Jesus and his disciples are to be regarded as belonging, not to the Semitic, but to the Aryan race.

The Lost Ten Tribes of Israel.—In *S. Bibl. Arch.* XXX, 1908, pp. 107-115, 137-141, C. H. W. JOHNS discusses fifteen tablets published by Ungnad, and made the subject of a monograph by Schiffer, that mention

the inhabitants of a city called *Kannu'*, whose god was *Au*. Johns agrees with Schiffer that *Au* is *Yahweh*, and that the occurrence of numerous Hebrew names in these documents shows that their authors were Israelites who had been transported to Assyria by Sargon in the middle of the eighth century B.C. He thinks that *Kannu'* may have been the local pronunciation of *Canaan*, the name that these exiled Israelites gave to their new home. He also adds two more documents that belong to the same series and contain the same curious mixture of Hebrew with Assyrian names.

Hittite Inscriptions from Emir Ghazi and Aleppo.—In *S. Bibl. Arch.* XXX, 1908, pp. 182–191 (pl.), A. H. SAYCE attempts translations of the great altar-inscription of Emir Ghazi, of the Aleppo inscription, of the inscription on the face of a column at Nigdeh, of the inscription discovered by Belck on an obelisk at Bogcha, of the new inscription from Mer'ash, of the Karaburna inscription, and of the bowl-inscription. *Ibid.* pp. 211–220 (2 pls.), he attempts the translation of two Hittite inscriptions of Gurun, discovered by Sir Charles Wilson in 1879, and recently photographed by M. G. Jerphanion; also of two new Hittite inscriptions discovered by W. M. Ramsay in 1908 at Emir Ghazi.

A Phœnician Inscription of 1500 B.C.—In *S. Bibl. Arch.* XXX, 1908, pp. 243–244, C. J. BALL discusses an inscription in Petrie's *Sinai*, figures 138–139. A small sphinx has on one side of the base a Semitic inscription containing the name 'Athtar. From this the inference is drawn that the Phœnician alphabet was known to workmen in the Sinaitic Peninsula as early as 1500 B.C.

The Inscription of Zakir.—In *R. Sév.* XVI, 1908, pp. 357–376, J. HALÉVY subjects the inscription of the Syrian king Zakir, recently published by Pognon, to a philological and historical examination.

An Inscription from Baniâs.—In *Mél. Fac. Or.* III, 1908, pp. 313–322, P. L. JALABERT discusses the inscription found at Baniâs by B. W. BACON and published by him in *A.J.A.* XI, pp. 315–320. In line 3 he reads CEBB in place of CEBK; in line 7 ΑΓΡΟΥC instead of ΑΓΡΟΥ; in lines 12–13 ΔΙΑCHM instead of ΔΙΑKHM. ΕΛΙΟΥ, line 12, is interpreted as ΑΙλίον. α and ε are confused in two other places. CTAOTOYTOY is a proper name. He reads the whole inscription as follows: Διοκλητιανὸς καὶ Μαξιμιανὸς σὺν (αστοὶ) καὶ Κωνσταντῖος καὶ Μαξιμιανὸς κέσαρες λίθον διορίζοντα ἀγροῦς ἐποικίου Χρησιμιανοῦ στηριχθῆναι ἐκέλευσαν φροντίδι (Αἰ)λίον Στατούτου τοῦ διασημο(στάτου). Aelius Statutus is known from another inscription found at Djermâna and published in *Mél. Fac. Or.* I, p. 150. The writer argues that he was governor of Syria Phœnice sometime between March, 293, and May, 305 A.D.

Greek and Latin Inscriptions containing Semitic Names.—In *Eph. Sem. Ep.* II, 1908, pp. 323–344, M. LIDZBARSKI collects the Greek and Latin inscriptions containing Semitic material that have been published within the last two or three years. Among these are a text from Kefer Nebo that mentions Sima as a male instead of a female divinity, and along with him "the fellow-occupant of the bethel" and "the lion" as companion deities; also an inscription discovered at Gebal with a dedication to the sun; one from Deir el-Qal'a, that mentions Balmarcodes and Sima; one from Esh-Shuweifat that mentions the triad of Heliopolis; 175 short inscriptions from the Hauran that contain a great number of Semitic names, especially

Aramaic and Arabic names in Greek transcription. Similar in character are the inscriptions discovered by Savignac, by Littmann, and by Jouguet. There are also a number of Latin inscriptions from North Africa that contain Punic names.

ASIA MINOR

Hittite Remains near Marsovan.—In *Rec. Past*, VII, 1908, pp. 267–274 (pl.; 8 figs.), G. E. WHITE argues on the basis of vase fragments, which are similar to those found at Boghaz-Köi, that the mounds near Marsovan are Hittite. The mound at Zile and a rock-cut tomb at Gerdek-kaya are also Hittite.

Ephesus.—A retraction of certain statements in the recent British Museum publication on Ephesus, by which Lygdamis, the Cimmerian chief, was wrongly connected with temple B, is made by D. G. HOGARTH in *J.H.S.* XXVIII, 1908, p. 338, and a note added to say that he places the Cimmerian attack rather later than 660 B.C., and sets 652 conjecturally as the lower limit of date for temple A and its contents.

The Façade of the Library at Ephesus.—In *Jh. Oest. Arch.* I, XI, 1908, pp. 118–135 (14 figs.), W. WILBERG discusses the architectural details of the façade of the library at Ephesus and gives a restoration.

The Mercenaries and the Military Colonies of Pergamon.—In *R. Arch.* XII, 1908, pp. 174–218, A. J. REINACH begins a study of the military institutions of Pergamon with a discussion of the agreement of Eumenes I with his mercenaries (Fraenkel, *Inscriptionen von Pergamon*, I, No. 13; Dittenberger, *Orientalis Graeci inscriptiones selectae*, I, No. 266; Michel, *Recueil d'inscriptions grecques*, No. 15), which is assigned to the time before the battle of Sardis (spring of 261 B.C.). The causes of the war against Antiochus I, the condition and relations of the Pergamene kingdom and the royal family, and the clauses of the agreement are discussed in detail.

A Cilician Boundary Inscription.—In *R. Scm.* XVI, 1908, pp. 434–437, J. HALÉVY discusses the Aramaic boundary inscription lately published by J. A. Montgomery in *J.A.O.S.* XXVIII, 1907, pp. 164–167.

A Graeco-Aramaic Inscription.—In *C. R. Acad. Insc.* 1908, pp. 434–447 (2 figs.), H. GRÉGOIRE discusses a bilingual inscription in Greek and Aramaic found at Faraşa in Cappadocia and first published by J. Marquart. A new examination of the stone shows that it concerns a certain Sagarios, who, as *magus*, took part in a ceremony in honor of Mithra, and that it should probably be dated in the first century A.D. He also publishes two other late Greek inscriptions from the same place.

Phrygia.—In *Alt. Or.*, IX, 1907, Pt. II, pp. 1–31 (15 figs.), E. BRANDENBURG discusses the archaeological remains of ancient Phrygia and its position in the civilization of Asia Minor, coming to the conclusion that, both in civilization and probably also in its political relations, Phrygia was dependent upon the main centres of the Hittites. Architectural elements derived from the Hittites were developed and perfected, particularly in the geometrical rock façades that are characteristic of Phrygia. The execution of these must be placed about 1000 B.C., which fact makes it certain that they are independent of Greek influence. Accordingly, it must be assumed that similar remains in Greek art have been borrowed from Phrygia, and that a number of the laws of harmony observed in the

Parthenon and other Greek temples are developments of the principles seen in Phrygian rock façades.

The Archaic Phrygian Inscription from Tyana. — In *Annals of Archaeology and Anthropology*, I, 1908, pp. 13-16, J. L. MYRES discusses the archaic Phrygian inscription found by Garstang at Tyana. It is very fragmentary and only a small portion of any one line is preserved. The word ΜΙΔΑ perhaps refers to King Midas, and if so is a confirmation of the date, the early part of the seventh century, suggested by the forms of the letters.

Grave Inscriptions from Phrygia. — In *Hermes*, XLIII, 1908, pp. 522-577, B. KEIL discusses at length two grave inscriptions from Asia Minor, one from Termessus published in *B.C.H.*, 1899, p. 178, and the other (*C.I.G.* 3776) from Nicomedia. The unintelligible portion of the former he restores thus: *Ἀλλά Ὁ[Α]ῶλλο[ν] Μο[λῶλου] τὴν σωματοθήκην ἐαυτῇ. προιγορε[ύ]ει θεγαθράσιν τὸ κατὰστρομα πελικεῖνους διενδῆσαι· ἐὰν δὲ μὴ συστυχήσῃ τις, ἴστα[ι] ἐ[ξ] νοχος τῷ κυριακῷ ταμείῳ * ἐ.*

GREECE

ARCHITECTURE

The Amphiareum at Oropus. — In *Ath. Mitt.* XXXIII, 1908, pp. 247-272 (4 pls.; 7 figs.), F. VERSACE describes and restores the temple and the stoa of Amphiaraus at Oropus. The temple consisted of a cella 21.66 m. long by 12.87 m. wide, a portico 5.24 m. deep, with a façade composed of six Doric columns between antae ending in engaged columns, and a small rear portico with two unfluted Doric columns, the door in the rear wall showing traces of a wooden sheathing. The cella had two rows of five unfluted Ionic columns. The nave was shut off from the aisles by a wooden grille. In the nave, between the second and third columns, is the foundation for a *τράπεζα* (mentioned in the treasure list, *I.G.* VII, 3498). In a line with the fourth column in each row there are remains of a second foundation which may have supported the cultus statue. There are several indications of a rebuilding, in the course of which the rear portico was added.

The stoa was 109.90 m. long (outside measurements) by 10.10 m. wide (inner face of rear wall to inner edge of stylobate). At each end there was a chamber, the three last intercolumniations being closed by a wall with pilasters, or more probably engaged columns. Each chamber was shut off from the stoa proper by two Ionic columns between antae, the space between each column and anta being filled by a stone barrier probably high enough to prevent a man from seeing over it, that between the two columns by a wooden partition, in which there was presumably a door. The central portion of the stoa was open, with forty-one Doric columns in the façade and seventeen Ionic interior columns. Along the rear wall of the central part and presumably around all four walls of the chambers a continuous marble bench was built in later times.

On stylistic grounds both buildings are to be dated in the first half of the fourth century B.C. An inscription relating to the construction of a water channel (*I.G.* VII, 4255) gives as the *terminus ante quem* the year 387 B.C., for the course of the channel was affected by the position of the

temple, which must therefore be earlier. The two chambers in the stoa were used for the rite of incubation, the one to the east being slept in by men, that to the west by women, as is proved by an inscription (I.G. VII, 235). Cf. also Pausanias, I, 34, 5.

The "Theatron" at Olympia.—The use of the word *theatron* in Greece to designate stone buildings with semicircular rows of seats for spectators has so obscured an earlier meaning as to cause some serious misapprehensions. One of these is the belief that such a stone building did once exist and may yet be found at Olympia. Xenophon's use of the word *θέατρον* to designate the place where a battle occurred between the Arcadians and the excluded Eleians at the games of 364 B.C. (*Hell.* VII, 4, 31), recalls the early meaning, a place for on-lookers to stand, and applies here to the porticoes and terraces which commanded a view of the space east of the great ash altar. In this space, to which the word *ἀγών* in the Homeric sense is applied by Pindar, certain contests were still celebrated in 364, and here all had been held before the laying out of the *dromos* on the site of the later stadium in 450. In this earlier *agon* the most famous Pan-Hellenic celebration of 476, which occasioned six of Pindar's Olympian odes, was held, and it was chiefly to secure a vantage ground for viewing the games and processions in this place that the "treasuries" were built in such an ungainly row and on such insecure ground, just to the north, all before 450. As all games, to a very late epoch, were held around an altar, the word *theatron* had originally the same religious associations as the kindred *theoria*. (L. DYER, *J.H.S.* XXVIII, 1908, pp. 250-273.)

The Acanthus Column at Delphi.—Recent investigations have shown that Tournaire's restoration of the acanthus column at Delphi (*Fouilles de Delphes, Architecture*, I, Pl. XI) and the restoration in plaster in the Museum at Delphi are to be corrected in some points. There were five drums instead of four, the total height of the column being 8.65 m., not 7.80 m. There was no architectural base, the tips of the three large leaves at the bottom resting directly on the plinth. The tripod was not supported on the heads of the dancers, but on the three acanthus leaves of the capital, which have holes on top into which the feet of the tripod were fitted. The position of the dancers was in the spaces between the three legs. They helped to support the basin of the tripod. (TH. HOMOLLE, *B.C.H.* XXXII, 1908, pp. 205-235; 20 figs.)

The Origin of the Ionic Frieze.—In *Jh. Oest. Arch. I.* XI, 1908, pp. 47-53, H. THIERSCH discusses the origin of the Ionic frieze. He believes with Birt that it developed from the painted and sculptured bands of figures on Egyptian walls. It was not an original part of the Ionic entablature, but was first used in Asia Minor to decorate a bare wall. This was at first its object in Greece, but the earliest examples, the Parthenon and Phigalia friezes, were not effectively placed. On the Erechtheum and on the Nike temple the case was different, and this use of the frieze was afterwards carried back to Asia Minor.

Supports for Tripods on the Acropolis.—In *Ath. Mitt.* XXXIII, 1908, pp. 273-278 (3 figs.), G. KAWERAU discusses a number of peculiar poros blocks found on the Acropolis at Athens. They are in plan equilateral triangles with the corners cut off and furnished with a groove. The top surface of one is concave. This suggests that it supported the basin of a tripod,

the legs of which were fitted against the apices of the triangle. The supports were presumably two courses high, the blocks tapering slightly. A reconstruction is attempted.

Architectural Forms in Greek Vase Paintings.—In *R. Arch.* XI, 1908, pp. 359–390 (23 figs.), R. VALLOIS discusses the architectural forms in the paintings on Greek vases. In paintings of the sixth century some Doric columns are evidently slender and of wood, others heavy and of stone. The capitals are rude and clumsy. In the fifth century the development of the capital can be traced in the paintings. Similarly the development of the Ionic capital can be followed, as can also that of the entablature. Various forms of acroteria are also observed.

SCULPTURE

Ionic Sculpture in its Relation to Coins.—In *Le Musée*, V, 1908, pp. 219–229 (23 figs.), J. DE FOVILLE points out the connection between Ionic sculpture and coins of the Ionian cities of Asia Minor in the sixth century B.C.

The Winged Victory.—In *C. R. Acad. Insc.* 1908, pp. 221–236 (10 figs.), G. RADET discusses the origin of the winged Victory. Literary tradition attributes it to Archermus of Chios and this was apparently confirmed by the discoveries at Delos. It is doubtful, however, if the inscription with the name of Archermus really belongs to the winged statue found near by. The type is derived from that of the great Asiatic animal goddess called *Cybele* by the people of Sardis (*A.J.A.* XII, pp. 358–359), and originally had her attributes. The Delian statue should probably be restored with a flower in the right hand and a lion near the left leg.

The Parthenon Pediments.—C. Smith's proposal to supply a small flying Nike, perhaps of bronze, in the point of each of the Parthenon gables, is severely criticised by B. SAUER in *Jb. Arch. I.* XXIII, 1908, pp. 101–107 (fig.), chiefly on the grounds that the objects already known by marks in the marble are sufficient to fill the spaces, and that the existence of Victories in both pediments among the full-size marble figures is by no means disproved by turning the so-called Nike of the east pediment into an Iris of the west pediment.

The Western Pediment of the Temple of Zeus at Olympia.—In *Sitzb. Mün. Akad.* 1908 (Abhandlung 7; 20 pp.; pl.), P. WOLTERS discusses the arrangements of the figures in the western pediment of the temple of Zeus at Olympia proposed by Treu (*Jb. Arch. I.* 1888, p. 175, *Olympia*, III, p. 130), and Skovgaard (*Apollon-Gavlggruppen fra Zeustemplet i Olympia*, Copenhagen, 1905), and arrives at the following arrangement (the figures being designated by the letters assigned to them by Treu): ABCDEFGMNO LHJKPQRSTUV.

The West Frieze of the Treasury of the Cnidians at Delphi.—In *B.C.H.* XXXII, 1908, pp. 177–187 (fig.), F. POULSEN identifies the scene portrayed on the west frieze of the treasury of the Cnidians at Delphi. It was not the arrival of Heracles on Olympus, as Homolle proposed, but the incident in the Trojan war described in *Iliad*, XX, 32 ff. The gods are preparing to enter the contest, — Hera, Athena, Poseidon, Hermes, Hephaestus, on the side of the Greeks, Apollo, Artemis, Leto, Ares, Aphrodite, Xanthus, on the side of the Trojans. On the slab at the north end are Hermes,

Athēna mounting a chariot, and Hephaestus (Homolle's Heracles), identified by the handle of a hammer in his right hand. The figures of Poseidon and Hera are not preserved, but the winged horses of the chariot belong to the former and show that he was not far off. At the right, on the slab at the south end, is a fragment of the figure of Ares, identified by his leather cuirass. The goddess descending from the chariot (Homolle's Hebe) is Aphrodite. Her pose (she is putting on a necklace and looking over her shoulder at Ares) and the sparrow or dove on the chariot pole make the identification certain. The two heads in profile to the left belong to Apollo and Artemis. In the centre was a battle scene, the *ἀπιορτία* of Achilles. The west frieze thus forms a pendant to the east frieze, which represents the gods watching the contest over the body of Patroclus (*Iliad*, XVII, 90 ff.).

New Interpretations of Reliefs from the Asclepieum at Athens. — In 'Εφ. 'Αρχ. 1908, pp. 103-134 (6 figs.), I. N. SVORONOS interprets several reliefs found in the Asclepieum, which have hitherto baffled all attempts at explanation. No. 1351 (cf. Staës, *Marbres et bronzes du Musée National et Καστριώτης, Γλυπτὰ τοῦ Ἐθνικοῦ Μουσείου*) is recognized as the discovery of the exposed infant Asclepius by the shepherd Arethanas in a cave on Mount Titthium. No. 1358, as the arrival of the servant of Asclepius with Hygieia, who is met by Telemachus of Acharnae (cf. *C.I.A.* II, 1649, which records this historic event). No. 1360 is recognized as Asclepius himself, buried in thought, perhaps a part of the foregoing group. No. 1366 probably represents the procession of the *Atthides*, descending the steps from the Asclepieum. No. 1353 represents the hero *Sphyrus*, a descendant of Asclepius, with symbols of surgery, a mallet, knives or chisels, perhaps a trephine, and the flowers and fruit of the poppy, used for anesthesia. No. 1332, a votive relief of 350-300 B.C., represents three divinities, apparently Asclepius, Demeter, and Core, before whom stand six men, whose names are carved above, and of whom five have been honored with crowns of olive which are carved below. Two of these men are sons of the famous physician Dieneches, and one of the still more famous physician Mnesitheus, and the conjecture is made that we may have here five army surgeons, who had served under Antiphilus in the campaign of Lamia and Thessaly in 323 B.C., coming with their general to offer professional thanks to their patron deities.

Unpublished or Little-known Sculptures. — In *R. Arch.* XII, 1908, pp. 107-124 (6 figs.), S. REINACH publishes and discusses five works of sculpture: (1) A marble statuette of a seated Heracles. This is apparently identical with a figure published by Clarac (*Musée de Sculpture* 1989 = Reinach, *Répertoire*, I, p. 469, 1) which formerly belonged to Cavaceppi. The Cerberus in Clarac's engraving was probably added by Cavaceppi and has been removed. (2) A marble statuette of a boy (a fisher) asleep. These two statuettes were in London in the summer of 1908. (3) A bronze statuette of Heracles standing, formerly in the collection of Mr. W. Rome, in London. Heracles is youthful and beardless. His right hand rests on his hip; the left hand extends forward. He wears only the lion's skin, the head of which serves as a cap or helmet. The proportions and attitude are Polyclitan, and the statuette is probably a copy of a statue by Polyclitus. (4) The warrior from Celeia, a half Roman, half barbarian work. (5) A relief in Monaco, of mediaeval origin.

Some Statues from Delos.—In *B.C.H.* XXXI, 1907, pp. 389-419 (2 pls.; 9 figs.), F. MAYENCK and G. LEROUX discuss nine statues found on Delos at various times. They include two Polyhymniae of the Berlin type, a dancing Muse (Terpsichore), a seated Muse, Apollo Citharoedus, Artemis (the type is new), Leto in a type slightly modified from the Eirene of Cephisodotus, a Muse with the nebris, and a standing Muse. All are works of the late second or early first century B.C. The discussion turns especially upon the relation of these statues to the group of Apollo and the Muses by Philiscus of Rhodes. The authors question some of the conclusions of Amelung and Watzinger, but agree that the Polyhymnia, Terpsichore, Urania of Berlin, the Muse with the cithara, and the seated Muse from Delos show the same style, especially in the presence of the thin himation over the heavy chiton. The innovation of representing the heavy folds of the under garment as visible beneath the light mantle seems to have originated, if not in the work of Philiscus, at least in southeastern Asia Minor or the neighboring islands. A remarkably fine example is the statue of Cleopatra, wife of Dioscurides (140 B.C.), found at Delos. Delian sculpture shows both Athenian and Asiatic influence. Seven other pieces of sculpture from Delos are discussed by L. BIZARD, G. LEROUX, and M. BULARD, *ibid.* XXXI, 1907, pp. 504-529 (4 pls.; 6 figs.). These are: 1. The colossal phallus found in 1886; 2. A nude Dionysus seated on a throne, a copy of a third century work; 3. and 4. Two standing Sileni, representing actors garbed as Silenus; 5. A poros relief of Dionysus in the costume of Artemis; 6. A small relief with symbols of Isis; 7. A relief relating to the cult of Agathodaimon.

Pliny as Evidence for Hegias.—In *R. Ét. Gr.* XXI, 1908, pp. 119-120, R. PICHON suggests that the words of Pliny (*N.H.* XXXIV, 78), *Hegiae Mineræ Pyrrhusque rex laudatur*, etc., refer to a single group of sculpture. The correctness of this interpretation is questioned by S. REINACH.

Damophon of Messene.—In *B.S.A.* XIII (Session 1906-1907), pp. 357-404 (3 pls.; 28 figs.), G. DICKINS describes and publishes the fragments of the group at Lycosura by Damophon (see *B.S.A.* XII, pp. 109-136; *A.J.A.* XII, p. 224) and reconstructs the entire group (Fig. 1). The piece of embroidered drapery is found to be part of Despoina's veil. The mechanical construction of the group is discussed by K. KOUROUNIOTIS (pp. 384-389). Damophon's style can now be better studied than that of almost any other Greek sculptor. He was a maker of colossal statues and a fine engraver of decorative detail. The bodies and the drapery of his figures are not well designed or executed, while his heads show a mastery of material and execution, combined with power and originality. The attitudes of Demeter and Despoina remind one of the Demeter and Persephone (?) from the east pediment of the Parthenon, and his other works, which are briefly discussed, also appear to have followed known types.

The Younger Praxiteles.—In *B.C.H.* XXXII, 1908, pp. 236-265 (2 figs.), W. VOLLGRAFF publishes an inscription from Argos recording the founding of a cult and a temple of the Asiatic Leto after the expulsion of the Macedonian garrison by Demetrius Poliorcetes in 303 B.C. The temple is to be identified with that containing a statue of Leto by Praxiteles (Paus. II, 21, 8). This artist must be the grandson of the great Praxiteles. The statues of Leto and her children in the temple of Apollo Prostaterius at

Megara (Paus. I, 44, 2) and in the double temple at Mantinea (Paus. VIII, 9, 1) are to be assigned to him, the style of the reliefs on the base from Mantinea thus finding a reasonable explanation. He also made a statue of Leto of *smaragdus* at Myra in Lycia, an Aphrodite at Alexandria in Latmos, and perhaps the statues of Rhea and Hera in the Heraeum at Plataea (Paus. IX, 2, 7).

The Pythocles Base.—In *Jh. Oest. Arch. I. X*, 1908, pp. 326–329 (2 figs.), E. Löwy discusses the base of the statue of Pythocles at Olympia

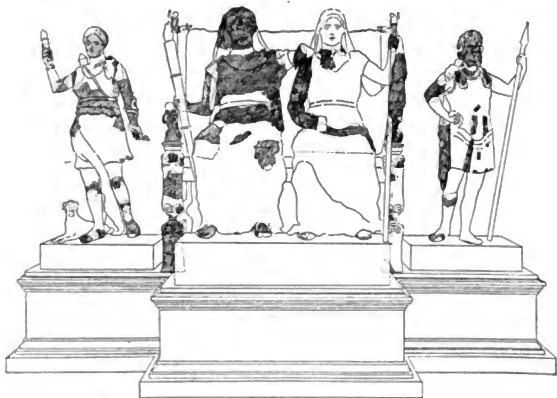


FIGURE 1.—GROUP BY DAMOPHON AT LYCOSURA.
(Hatching denotes extant fragments.)

and concludes that it supported a figure standing in a position similar to that of the Borghese Ares.

The Learchus of Aristonidas.—In *Jh. Oest. Arch. I. X*, 1908, pp. 243–250 (4 figs.), W. KLEIN discusses a torso, now lost, published by Jan de Bisschop (Episcopus) in his *Paradigmata graphices variorum artificum* (Hague 1671), pl. 27, after a drawing of Poelenborg. It represents a youth sinking upon the ground with his head falling back upon his left shoulder. Under his left arm is the hand of a figure which once supported him. Klein argues that this was a copy of the Learchus in the group of Athamas and Learchus by the Rhodian sculptor Aristonidas known to us from Pliny, *N.H.* XXXIV, 140.

Dumont d'Urville and the Discovery of the Venus of Melos.—In *R. Ét. Anc. X*, 1908, pp. 205–248, M. BERNIER discusses at length the part played by Dumont d'Urville in the discovery of the Venus of Melos. He points out that the French consular agent at Melos named Brest showed the statue to d'Urville and to other French naval officers. Brest wrote to David, consul general at Smyrna, who in turn communicated with Rivière, the French

ambassador at Constantinople, but not before the latter had heard of the statue from d'Urville. A notice of the discovery, dated January 11, 1821, and signed by d'Urville, is also published and its text compared with that of three other accounts left by him. This document is now in the library at Caen and was probably once the property of Pierre-Aimé Lair, a friend of d'Urville's.

The Monemvasia Statuette. — In *Ἐφ. Ἀρχ.* 1908, pp. 135-142 (3 pls.; 2 figs.), B. STAES discusses the terra-cotta statuette of Aphrodite from Monemvasia (*A.J.A.* XII, p. 458). He dates it in the second century B.C., but concludes that its resemblance to the Aphrodite of Melos is not close enough to solve the problem of the restoration of that statue.

The Aphrodite of Clazomenae. — In *B. Soc. Ant. Fr.* 1908, pp. 137-138, E. MICHON records the finding of the lower part of the body, the feet, and the base of the statue in the Louvre known as the Aphrodite of Clazomenae. The new pieces have been added to the figure, which is about half life size. In *B.C.H.* XXXII, 1908, pp. 259-265 (pl.), the same writer discusses the statue as now set up.

A Youthful Asclepius Head. — In *Jh. Oest. Arch. I.* XI, 1908, pp. 111-114 (3 figs.), K. HADACZEK discusses the head of a youthful Asclepius in the Museo Nazionale in Rome. He identifies it by the heavy band about the hair which is common on the bearded statues. The face is not unlike that of Apollo, but more effeminate. Hitherto the youthful Asclepius has been known almost wholly from statuettes. The original, of which the head is a copy, was probably of bronze of the fourth century B.C., and it seems to be reproduced upon a coin of Marciopolis of imperial times.

The Eros of Thespiae. — To the list of figures of Eros drawing the bow, C. RAVAISSON-MOLLIEN (*B. Soc. Ant. Fr.* 1908, pp. 147-148) adds another of which there is a cast in the Louvre (No. 125). The original was once in the collection Somzée. The head is very like the Harcourt head, but with some differences. The writer believes that it is to be traced back to the Eros of Thespiae by Praxiteles.

Helicon. — In *R. Ét. Anc.* X, 1908, pp. 248-249, E. POTTIER suggests that the stele published in *B.C.H.* 1890, pls. IX and X, and explained as Boreas or Pan, is really a personification of Helicon. He bases his argument upon a fragment of Corinna (*Berliner Klassikertexte*, V, Pt. 2, pp. 26 ff.).

Representations of Marsyas. — In *Jh. Oest. Arch. I.* X, 1908, pp. 312-326 (10 figs.), K. HADACZEK discusses three representations of Marsyas. The first of these is the torso in the Belvedere believed by Sauer to be a Polyphemus, but here shown to be a Marsyas of Attic origin of the fourth century. A Pompeian wall painting (Helbig, *Wandgemälde*, n. 224) is compared with it. The second statue is a nude standing figure with a panther skin about the neck in the museum at Agram. This formed part of a group. Two other copies of it are known, one at Holkham Hall, England, and the other, wrongly restored as a Heracles, in the gardens of the Villa Borghese. The third figure appears on a relief in two pieces in the Palazzo dei Conservatori in Rome. Marsyas stands leaning against a tree; before him stand a Scythian slave and Apollo, behind him are Leto and Artemis.

The Suicide of Ajax. — In *Boll. Arte*, II, 1908, pp. 361-368 (pl.; 9 figs.), L. A. MILANI discusses a bronze statuette of Ajax falling on his sword (Fig. 2), found in a fifth century tomb at Populonia. Its total length is

11.1 cm. Beneath the base is a projecting piece of metal by which it was attached to a tripod or to some similar object. The modelling of the back and head and the fineness of execution show that it is a copy of a large Greek original of the early part of the fifth century, perhaps a work of the Aeginetan school. The author also points out that the representations of the suicide of Ajax fall into two classes, those which presuppose the belief that the hero was invulnerable except under the arm, and those which do not.

A Votive Relief in Constantinople.—A votive relief to Zeus Olbios in the Imperial Museum at Constantinople is published by EDUEM BEY, in *B.C.H.* XXXII, 1908, pp. 521-528 (2 pls.). The god is represented with bull's horns, standing, pouring a libation on an altar from a patera in his right hand; his left leans on a staff. In the lower right-hand corner is an eagle. The preparations for a sacrifice are represented in a lower register. The identification is made certain by an inscription.

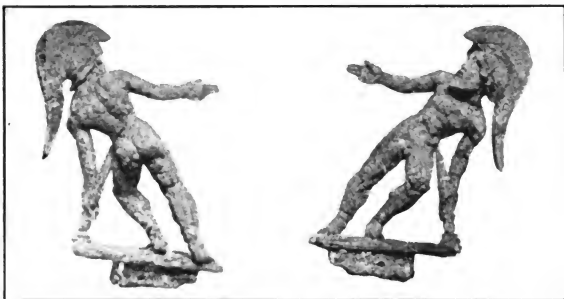


FIGURE 2. —STATUETTE FROM POPULONIA.

Zeus Ktesios.—A marble stele from Thespieae, now in the museum at Thebes, with the representation in relief of a coiled serpent and the inscription *Διὸς Κτησίον* in letters of the third century is published by M. P. NILSSON in *Ath. Mitt.* XXXIII, 1908, pp. 279-288 (fig.). He discusses the cult of this domestic divinity and compares the allied cults of the Dioscuri at Sparta, Agathos Daimon, Zeus Philios, and Zeus Meilichios.

Catalogue of Casts in the Metropolitan Museum, New York.—The Metropolitan Museum of Art has issued a catalogue of casts. The introduction, by Edward Robinson, outlines the plan of the catalogue and gives a brief history of the collection. The Egyptian section is by Albert M. Lythgoe, the Oriental and Greek and Roman sections by Gisela M. A. Richter, and the post-classical periods are treated by Ethel A. Pennell. 2607 numbers are catalogued. There is an index by places, a general index, and a bibliography. The plates represent, not the casts, but restorations or the surroundings of the originals. (*Metropolitan Museum of Art. Catalogue of the Collection of Casts.* New York, 1908, printed for the museum. xxxiv, 383 pp.; 33 pls.; 8 vo.; \$0.50.)

VASES AND PAINTING

The Sarcophagus from Hagia Triada. — The painted stone sarcophagus from Hagia Triada, since 1903 in the museum at Candia, is published and discussed by R. PARIBENI in *Mon. Antichi*, XIX, 1908 (86 pp.; 3 pls.; 23 figs.). A summary, with comments by A. J. REINACH, is in *R. Arch.* XII, 1908, pp. 278-288 (3 figs.). On one side is a scene of sacrifice to the dead, who stands before his tomb to receive from three men a boat and two calves; while at the other end a woman and two long-robed men, one of whom is playing a lyre, offer a sacrifice of wine, which is poured into a large vase that stands between two pillars surmounted by four-bladed axes, on one of which sits a bird. On the other long side is an altar, beside which is a pillar surmounted by a four-bladed axe, on which is a bird. Before the altar is a man, behind whom is a bull, already sacrificed, and two goats. Behind the bull is a flute-player. Three other persons, in long skirts, are only partially preserved. On one end is a chariot drawn by two horses. In the chariot are two persons. On the other end are two persons in a chariot drawn by two winged griffins. A bird sits on a wing of one of the griffins. These scenes are enclosed in wide borders enriched with spirals and rosettes. The coloring is brilliant and in part realistic. Paribeni believes that the deceased is represented on each side and each end. Reinach doubts this. Comparison with Egyptian monuments, the fact that chariots are represented and that griffins of Babylonian type are present, show connection with Egypt and the East. The sarcophagus belongs to the Late Minoan II period (about the fifteenth century B.C.).

Prehistoric Pottery of Chaeronea and Elatea. — In 'Εφ. 'Αρχ. 1908, pp. 63-96 (4 pls.; 16 figs.), G. SOTERIADES describes and carefully classifies a very interesting collection of pottery, mostly native, of the neolithic and early bronze ages found in the course of several excavations within the last eight years in the remains of tombs and small settlements near Chaeronea and in the plain of Phocis. He lays particular stress on the continuity and gradual development of style and method from the neolithic into the "Mycenaean" age (see *A.J.A.* XII, pp. 365 f.).

An Inscribed Protocorinthian Lecythus. — Among the contents of tombs excavated at Cumae by E. Stevens between the years 1878 and 1896, and now in the Naples museum, is a Protocorinthian lecythus inscribed 'Υαμίε Ταννίνα, having scratched upon it also the beginning of the Greek alphabet. A preliminary publication is given by E. GARRICI in *Not. Scav.* 1908, pp. 113 f. (2 figs.). A full publication of the Stevens collection is contemplated.

A Caeretan Amphora. — In *Transactions of the Free Museum of Science and Art*, University of Pennsylvania, II, 1908, pp. 155-157 (pl.), W. N. BATES publishes an amphora 29 cm. high decorated with horizontal bands in black, broad and narrow alternately, about the body of the vase. On the shoulder is a ray ornament, black and white rays alternating, and on the foot a tongue pattern in red and white. The writer argues that this is a Caeretan amphora.

Two Cyrenaic Cylices. — Two cylices, one at Athens and one at the Ashmolean Museum, may be added to Dugas's fourth class of Cyrenaic vessels of this kind. The second shows the Cyrenaic style of beard on a

larger scale than is known elsewhere, and both have a ringed band at the top of the foot which appears to be characteristic of this class. (J. P. Droop, *J.H.S.* XXVIII, 1908, pp. 175-179; 4 figs.)

Five Red-figured Cylices.—In *Transactions of the Free Museum of Science and Art*, University of Pennsylvania, II, 1908, pp. 133-154 (7 pls.; 9 figs.), W. N. BATES discusses five red-figured cylices in the Free Museum. The first is decorated with a running warrior on the inside and a battle between Greeks and Trojans on the outside and bears the inscription Ἐπ(π)ίλυκος καλός. The second, adorned with scenes from the pal-



FIGURE 3. — CYLIX IN PHILADELPHIA.

aestra, is inscribed Λύκος καλός. This was painted by Onesimus. One of its scenes represents the game σκαπέρδη. The third (Fig. 3) has a figure of a youth holding a pig in one hand and an object identified as horns of consecration in the other. The two other vases show affinities with the Tityus and Penthesilea cylices in Munich. One of them has a border of ivy leaves overlaid in red paint upon the black background of the interior. It is decorated with two standing female figures on the inside, and men and women conversing on the outside. The other has two youths

conversing on the inside, and a Victory between two youths twice represented on the outside.

A White Athenian Pyxis.—In *B. Metr. Mus.* III, 1908, pp. 154-155, Miss G. M. A. R(ichter) gives a brief account of an Athenian pyxis recently acquired by the Metropolitan Museum of New York. Running about the body of the vase is a scene representing the judgment of Paris painted upon a white ground. The vase is 17 cm. high, including the cover, and is in an excellent state of preservation. It is a fine example of Attic vase painting of about 470 B.C.

Midias and his Style.—In the *Mémoires de l'Institut National Genevois*, XX, 1908, pp. 45-155 (15 pls.; 43 figs.), GEORGES NICOLE publishes a study of Midias and his school (*Meidias et le style fleuri dans la céramique attique*). Taking the signed hydria in the British Museum for his starting-point, he assigns to Midias a hydria in Carlsruhe, two in Florence, and fragments of one in Boston, and of one in Athens. There are twenty-six other vases which may have come from his workshop. He discusses the characteristics of the painter and his date, which he thinks covers the whole first half of the fourth century. His style influenced later Attic vase painting as well as that of Magna Graecia and especially the work of Assteas and Python.

The Vagnonville Vase.—In *Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 107–112, E. PRUHL criticises Engelmann's interpretation of the holes at the foot of the mound on the Vagnonville vase (*A.J.A.* XII, p. 228). R. ENGELMANN makes a brief rejoinder.

The Amphora from Melos with a Gigantomachy.—In *Jh. Oest. Arch. I.* XI, 1908, pp. 135–141 (2 figs.), P. DUCATI discusses the amphora from Melos in the Louvre decorated with a gigantomachy. He disagrees with Furtwängler, who connects it with the Talus amphora, and argues that the presence of Amazons, the character of the faces, and the carelessness of the painting all show that it is of much later date.

A Vase from Kertch.—In *Rend. Acc. Lincei*, XVIII, 1908, pp. 375–390, P. DUCATI discusses the fourth century vase from Kertch, published by Furtwängler and Reichhold, *Griechische Vasenmalerei*, Pl. 70. The female figure at the left he believes to be seated on an omphalos, not on a rock. The figure is not named by Furtwängler, but is identified by some with Peitho. On account of the omphalos Ducati regards her as Ge. Another scene represents the birth of Dionysus, or Iacchus, who is represented as born of Ge.

The Birth of Helen from the Egg.—In *Sitzb. Berl. Akad.* 1908, pp. 691–703 (4 pls.; 4 figs.), R. KEKULE v. STRADONITZ publishes and discusses the vase paintings representing the birth of Helen from the egg, which were unknown when he treated the subject in 1879, in the *Festschrift* presented by the University at Bonn on the fiftieth anniversary of the Archaeological Institute at Rome. These are a cylix by Xenotimos in Boston, a crater in Bologna, fragments of two vases in Bonn, a crater in Bari, a Campanian hydria in Berlin, and a red-figured lecythus in Berlin. The vase of Xenotimos is the earliest, dating about 450–440 B. C. The vase in Bari, on which the birth of Helen is represented as a scene in a play of *φλύακες*, was probably painted in the latter part of the fourth century. The lecythus in Berlin, an Attic vase of about 450–440 B. C., shows that at that time the representation, with the egg opened, as it were, to disclose the little Helen within, was familiar.

The Development of Apulian Vase Painting.—In *Jh. Oest. Arch. I.* X, 1908, pp. 251–263 (pl.; 4 figs.), P. DUCATI discusses the Apulian style of vase painting and its development from the Attic. He finds in fragments of an amphora at Carlsruhe the beginnings of the style which was at first noble and dignified, but later became hasty and careless. The Apulian painters were not skilful at drawing, but their vases were painted with exuberance and are always full of movement.

The Painted Stelae of Pagasae.—In *Ἐφ. Ἀρχ.* 1908, pp. 1–60 (4 pls.; 7 figs.), A. S. ARVANITOPOULLOS discusses the place of the painted stelae of Pagasae (see *A.J.A.* XII, pp. 364 f.) in the history of Greek painting. They are contemporary with some of the great masters and for this reason, and because of their size, they form a more reliable basis for our knowledge of Greek painting than the vases, the frescoes, or the Fayum portraits. Many of the stelae were set up in large *naiskoi* which protected them from the weather. The writer points out that the word *τύποι* may be applied to such paintings as well as to reliefs; and concludes with some observations on the encaustic process as seen in the Pagasae stelae. (See also *Hellenic Herald*, II, 1908, pp. 167–168.)

Apelles and Protogenes.—In *Jh. Oest. Arch. I.* XI, 1908, pp. 29-47, E. MAASS argues that the *μονόκνημος* of Apelles (Petron. 83) was a picture of Lais with one leg bare. His Anadyomene was perhaps a portrait of Pausaspe. His book on painting was probably written in Ionic Greek, and a fragment of it is to be found in Erotian's *Lexicon to Hippocrates*, 117, 6 (Klein). This should read *ἐν ἄκρῃ* (cod. *κάρῃ*), *φῆσιν Ἀπελλῆς* (cod. *αἰγάδες*), *ὑπεποίεν* (cod. *ὑπέκνεον*) καὶ Λαῖδα (cod. *πάλαι*) τὰ σχήματα εὐθὺς ἰδὼν καὶ τὰ σκύτα. The lalysus of Protogenes, like his Tlepolemus and his Cydippe, was a cult picture of a local hero.

INSCRIPTIONS

A Very Ancient Thessalian Inscription.—In *Ἐφ. Ἀρχ.* 1908, pp. 59-62 (fig.), A. I. SPYRIDAKES offers a new reading of an inscription from the island Trikeri in the Gulf of Volo, showing it to be a dowry contract. (Cf. Kern, *Inscr. Thessal. antiq. sylloge*, p. 12, No. XXIV.)

Greek Inscriptions from Bulgaria.—In *Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 105-108, W. CRÖNERT discusses thirteen Greek inscriptions from Bulgaria published in *Schriften der Balkankommission*, Antiquarische Abteilung, IV, Vienna, 1906.

Cypriote Inscription.—In *Sitzb. Sächs. Ges.* 1908, I (8 pp.; pl.), R. MEISTER ('Beiträge zur griechischen Epigraphik und Dialektologie VI') publishes a very fragmentary terra-cotta plaque in Leipsic, on which is a small part of an inscription in the Cypriote syllabary. Three words, interpreted as *συνεγίνοντο*, *Δαυχναφορίῳ* (*Δαφνηφορίῳ*), and *σίγλων* (shekels) are made out.

Two Greek Inscriptions.—In *Jh. Oest. Arch. I.* X, 1908, pp. 299-311, E. RITTERLING restores a Greek inscription from Sardis referring to Ti. Julius Celsus Polemaeanus, the founder of the library at Ephesus. He also restores an inscription in honor of L. Minicius Natalis Quadronius Vernus found at Mangolia on the Black Sea (*Arch. Epigr. Mitth.* XIX, p. 108, n. 63).

Inscriptions from Halicarnassus.—In *Jh. Oest. Arch. I.* XI, pp. 53-75 (3 figs.), A. WILHELM discusses, with some correction of text, eight inscriptions from Halicarnassus and the vicinity.

Inscriptions from Tralles.—In *Jh. Oest. Arch. I.* X, 1908, pp. 282-299, E. GROAG discusses the families of T. Flavius Clitosthenes Claudiannus and M. Claudius P. Vedius Antoninus Sabinus, known from two inscriptions found at Tralles.

The ὕμνοδοί of Asia.—In *Jh. Oest. Arch. I.* XI, 1908, pp. 101-110 (2 figs.), J. KEIL discusses an inscription from Oedemisch briefly published in *Homeros*, 1872, p. 207. It was set up in the year 41 A.D. by the ὕμνοδοί of the province of Asia, probably to record some communication from Claudius. The ὕμνοδοί were accustomed to meet on the birthday of Tiberius and celebrate the imperial house with sacrifices and with song.

Dedication of a Lebes at Delphi.—In *B.C.H.* XXXII, 1908, pp. 445-448, A. D. KERAMOPOULLOS publishes an inscription on the rim of a bronze lebes at Delphi, described by P. Perdrizet (*Fouilles de Delphes*, V, p. 70) as a "*dédicace non dédicatoire*." The inscription reads: *Λαφόσσαρος μ' ἐπὶ παιδὶ ἐρῶ ἁ(ε)θλα ἔδωκε Εὐ[εργ]ῖνος*. The lebes was a prize offered by Λαφόσσαρος in funeral games held in honor of his son Εὐεργῖνος. On the

opposite side of the rim is an undecipherable inscription, which recorded the dedication of the lebes at Delphi by the winner of the prize. The fact that the inscription was written retrograde indicates that the lebes was dedicated in the old temple destroyed by fire in 548 B.C.

The Stele of Mnesitheos.—In *Sitzb. Berl. Akad.* 1908, pp. 1040-1046 (pl.; 2 figs.). H. DIELS republishes, with translation and notes, the inscription of Mnesitheos, from Eretria ('Εφ. 'Αρχ. 1897, p. 153, No. 7). He reads:

Χαίρετε τοι παριόντες, ἐγὼ δὲ θανὼν κατάκειμαι.
δεῦρο ἰὼν ἀνάκειμαι ἀνρω, τέος τῆδε τέθαιπται·
ξεῖνος ἀπ' Ἀλγίνης Μνησίθεος Δουριμάχαιο.
ὦν με πένθησε φίλη μήτηρ Τιμαρέτη·
τόμῳ ἐπ' ἀκροτάτῳ στήλην ἀρ' ἀμᾶτο νεωτέ.
ἤδη λαθὶ, ὦ Ἀΐδη, ἀν' ἐρέμῳ δτ' ἀπώσας.
Τιμαρέτη δ' ἔσστησε φίλῳ ἐπὶ παιδί θανόντι.

Ibid. p. 1150 f., reference is made to Bechtel's publication in Collitz's *Gr. Dialektinschr.* III, 2, 510, No. 5304, and Wilhelm's reading of line 4, καί μοι μῆμ' ἐπίθηκε φίλη μήτηρ Τιμαρέτη, is given.

Some Unpublished Attic Inscriptions.—Three inscriptions in the Epigraphical Museum at Athens and four from the Acropolis are published by A. M. WOODWARD in *J.H.S.* XXVIII, 1908 (pp. 291-312). One is a fragment of the quota-list of Athenian tribute, a part of the island list for the year 442. It fills some gaps in our knowledge of the matter as well as in the stone (*I.G.* I, 238, 240). Another shows that the change from three to ten stewards of the treasures of Athena and the other gods was made in the year 401. A third and fourth belong to the inventories of treasures filed by the outgoing stewards, one from the Parthenon list for 397, the other from a Hecatompedon list. The fifth, a treaty between Athens and Euboea, has been partially published by Köhler, *I.G.* II, 89, but only while it was still built into a wall and not fully legible. It belongs to the year 387-6. Another is part of a lengthy honorary decree, and the last is the order directing the city treasurer to pay for having a certain public inscription corrected. Four other inscriptions in the Epigraphical Museum are published by E. NACHMANSON in *Ath. Mitt.* XXXIII, 1908, pp. 199-210 (pl.). 1. The first, dating from the year 349-8, is the earliest example of a dedication by the treasurers of Athena, and also the earliest epigraphic record of the bestowal of crowns on Athenian citizens. The list of names furnishes the correct restoration of lines 6-8 of *I.G.* II, 698. 2. Fragment of an ephebus inscription of the second century B.C. 3. A small altar containing a dedication to Ὁρμή in late letters (cf. Pausanias I, 17, 1). 4. A large base with inscription in honor of Athenais, daughter of Herodes Atticus.

A Decree of the Archon Apollodorus.—In *Jh. Oest. Arch. I.* XI, 1908, pp. 82-100 (9 figs.), A. WILHELM discusses at length, *I.G.* II, 299 b, the preamble to a decree dated in the year of the archon Apollodorus.

The Phrynichus Inscription.—In *Hermes*, XLIII, 1908, pp. 481-510, I. M. J. VALETON discusses at length the inscription honoring the slayers of Phrynichus (*I.G.* I, 59). He restores lines 38-47 as follows: Εὐδικος εἶπε· τὰ μὲν ἄλλα καθάπερ Διοκλῆς· περὶ δὲ τῶν δωροδοκησάντων ἐπὶ τῷ ψηφίσματι ὁ ὑψηφίσθη Ἀπολλοδώρῳ, τὴν βουλὴν ζητῆ(σ)σαι (or βουλευσαι) ἐν τῇ πρώτῃ ἔδρᾳ τὴν ἐν Ἀρεΐῳ γάγῃ καὶ καλᾶζειν τῶν δωροδοκησάντων καταψηφίζομένην καὶ

εἰς δικάστηριον αὐτοὺς εἰσάγειν καθότι ἂν δοκῇ αὐτῇ. τοὺς δὲ Ἀρειοπαγίτας παρόντας ἀποφαίνειν ἅττ' ἂν εὕρωσι καὶ ἴαν τίς τι ἄλλο εἶδῃ περὶ τούτων. ἐξεῖναι δὲ καὶ ἰδιώτη, ἴαν τις βούληται.

Statute of an Attic Thiasos. — In *B.S.A.* XIII (Session 1906-1907), pp. 329-338, M. N. TOB publishes a fragment of a statute of an Attic *thiasos*, which was found in Piræus and acquired by the British Museum in 1906. This is the latter part of the statute and prescribes attendance at funerals of deceased members, assistance to members who have been wronged, and punishment for those who speak or act contrary to the statute. Apt parallels are drawn between the ancient Greek *κοινά* and mediaeval English gilds.

Lysistratus of Athens. — Λυσίστρατος Ἀθηναῖος ἐπόησε is a signature found in a Theban inscription otherwise written in the Boeotian dialect (*I.G.* VII, 2463). In an inscription from Tanagra (*ibid.* 553), now lost, Lolling read Λυσίστρατος Θηβαῖος ἐπόησε. Θηβαῖος is probably to be corrected to Ἀθηναῖος. (A. KERAMOPOULLOS, *Ath. Mitt.* XXXIII, 1908, pp. 211-214.)

Researches in Athenian and Delian Documents. — In *Klio*, VIII, 1908, pp. 338-355, W. S. FERGUSON publishes the second part of his studies in Athenian and Delian inscriptions. He shows that the Ptolemaea originated in Athens at the time of the establishment of the tribe Ptolemais in 224-3 B.C.; that they flourished until about 150, were revived in 103, and finally given up in 88. The statues seen by Pausanias in front of the Odeum were of Philometor Soter II and his daughter Berenice erected between 84 and 81 B.C. and are not to be connected with the equestrian statue on the Acropolis (*I.G.* II, 464). He also discusses the *agonothetae* and certain Panathenaic inscriptions.

Inscriptions from Delos. — In *B.C.H.* XXXI, 1907, pp. 421-470 (20 figs.), L. BIZARD and P. ROUSSEL continue the publication of inscriptions found at Delos in 1904 (cf. *ibid.* XXX, 1906, pp. 665-672). Nos. 10-17 are decrees, including one of the Athenians in honor of the priests of Delos about 150 B.C. Nos. 18 and 19 are resolutions of the Dionysiac artists. Then follows a series of dedications. Nos. 20-24 date from the period of Delian independence. No. 22 is a couple of hexameters by a choregus in honor of Dionysus. Nos. 25-29 are in honor of athletes and ephebi, including one in honor of a pancratiast and wrestler, whose 36 crowns are carved on a separate stone. The dedications of the Hermaists, Competalists, and Apolloniasts are given in Nos. 30-33, and Nos. 34-48 complete and correct the inscriptions of the Poseidoniasts of Berytus, already published in part, *ibid.* VII, pp. 407 ff. by S. Reinach. Nos. 49-58 are dedications in honor of Greeks and Romans and include two signatures of the sculptor Agasias of Ephesus and one of Aristandros of Paros. Dedications are made (Nos. 59-67) to Anius, Artemis, Aesclepius, Zeus, and Hephaestus. Nos. 67-71 are lists including apparently the subscribers to the repairs on the Agora of the Italians after the sack of 88 B.C. Nos. 72-74 are funerary, and Nos. 75-79 are fragments. E. SCHULHOF (*ibid.* XXXII, 1908, pp. 5-132, 449-498) publishes twenty-five inscriptions, inventories, accounts, etc., found at Delos in 1904 and 1905. No. 21, containing building accounts of the *ἱεροποιοί* in 208 B.C. is also discussed by H. LATTERMANN, *ibid.* pp. 279-302. Ll. 8-34 deal with work on the *στοὰ ἢ πρὸς τῷ Ποσειδεῖω*. Epistyles, other wooden beams and roof tiles for the stoa are mentioned, as well as *παραστάδες* and *πίνακες* for the *ὑπολαμπάς* which Lattermann explains as a second story covering

the whole building. The *πίνακες*, which are to be thought of as filling the spaces between the *παραστάδες*, were painted in encaustic (*ἐγκαΐαν*); the ceiling was painted *a tempera* (*γράφειν*). P. ROUSSEL (*ibid.* XXXII, 1908, pp. 303-444) gives a *prosopographia* (589 names) of the Athenians mentioned in the inscriptions of Delos during the second period of Athenian supremacy (from 166 B.C.), a supplement, based on new material, to Kirchner's *Prosopographia Attica*. To this is appended a series of critical discussions on the dating of the catalogues, Ferguson's new law, the Athenian archons, and the *Ἐπιμεληταί* of Delos. The texts of 71 new inscriptions are given.

Antiochus Megas.—In *B.C.H.* XXXII, 1908, pp. 266-270, M. HOLLEAUX discusses the date of a dedication by a certain Menippus of a statue of Antiochus Megas at Delos. It is to be dated between the years 205 and 192-191 B.C. since Antiochus was not called Megas before the former year, and his statue would not have been set up at Delos after the outbreak of the war with Rome in the latter.

The Origin of the Semitic-Greek Alphabet.—In *Z. Morgenl. Ges.*, LXII, 1908, pp. 283-288, F. PRAETORIUS attempts to explain the origin of the Greek alphabet from the Phoenician. The vowels, which take the place of the Semitic gutturals, were derived from the *names* of these letters in the Semitic alphabet rather than from their *sounds*, and the new letters of the Greek alphabet came from compounding certain of the Phoenician characters.

Epigraphical Terminology.—In *Rend. Acc. Lincei*, XVII, 1908, pp. 158-200, G. CARDINALI discusses the terms *δημόσιοι*, *ἱεροί*, *κατοικοῦντες*, *κάτοικοι*, *παροικοῦντες*, *μέτοικοι* and *πάροικοι*, and decides that their meanings are less fixed and definite than is commonly assumed to be the case.

Epigraphic Bulletin.—In *R. Ét. Gr.* XXI, 1908, pp. 153-217, E. BOURGUET and A. J. REINACH publish an epigraphic bulletin containing notices of the Greek inscriptions and works on Greek epigraphy published during the year.

COINS

Early Coinage.—In *R. Belge Num.* 1908, pp. 293-331, 433-450 (plates and figs.), I. N. SVORONOS publishes, in a French translation by J. Dargos, the first two instalments of a series of articles on numismatics. These first pages pass rapidly over the beginnings of trade by barter, with the later estimation of values in terms of cattle, to take up more in detail the early use of metals as mediums of exchange. — 1. The double and single axes of iron mentioned by Homer (*Il.* XXIII, 85 f.; cf. *Od.* V, 325; Hesych. *s.v.* *πέλεκυς*, *ἡμπελέκυς*) are illustrated by specimens found in 1857, in Sardinia, in 1896, in Cyprus, and later at Mycenae, at Hagia Triada, near Phaestus, in Crete, and in the sea near Cyme, in Euboea. Ingots of similar form are also pictured in Egypt, and appear on the reverse of certain silver coins of Damastion (Epirus) as late as the fourth century B.C. They have also been found in Germany, Switzerland, and France, probably by importation from Cyprus. The shape is probably due to the early use of iron and copper for actual axes, as the most useful weapon and tool. The marks they bear are indications of their current value as exchange-mediums according to their weight, and the invention of coinage thus goes much further back than the traditional seventh century, — at least as far as the Minoan

period.—2. The Homeric “talents of gold” were of comparatively small value, and are shown to be thin plates of the fixed form of the circular plates of a balance, but varying in weight. Such talents of gold are the circular plates found by Schliemann in the tombs at Mycenae.—3. Among primitive pieces of money are also to be reckoned the iron *pelanoi* of the Spartan Lycurgus, of which none have come down to us, but which are known to us from literary sources here discussed.

Greek Art as Illustrated by Coins of the Sixth Century.—Coins of the Dorian cities of Greece in the sixth century B.C. show no independence of style, but are under the influence of Ionic art. This is true of the whole eastern Mediterranean basin, but not of Macedonia or Magna Graecia. The coins of Macedonia of this period are characterized by a certain heaviness, by a love of movement, and by decorative motives which are perhaps a crude survival from Mycenaean art. The coins of Magna Graecia again possess a nobility and simplicity not found in the Ionic style. This distinction is borne out by the sculpture. (J. DE FOVILLE, *Le Musée*, V, 1908, pp. 131-138; 16 figs.)

An Athenian Tetradrachm with the Name of Hippias.—A tetradrachm bearing the name of Hippias is described and discussed by E. J. SELTMAN (in *Num. Chron.* 1908, pp. 278-280; fig.) in connection with Babelon's description (*Corolla Numismatica*, pp. 1-9) of an obol with the inscription HIP on the reverse.

Unpublished Coins of Athens and Mytilene.—I. N. SVORONOS publishes in *R. Ital. Num.* XXI, 1908, pp. 313-322 (figs.), a list of the names of Athenian archons previously unknown, taken from coins of the “new style” discovered since Beulé's *Monnaies d'Athènes* (1858) was published. He also prints the list of celebrated citizens of Mytilene mentioned on its coins of the imperial era, and adds another, of Dinomachus, known from an inscription copied by Cyriacus of Ancona, and published by Kaibel in *Eph. Ep.* II, p. 7. The portrait of Dinomachus bears a most striking resemblance to that of Commodus, in whose reign the coin was struck, and Svoronos takes this to be another illustration of the way in which persons model their personal appearance, as far as possible, after that of their rulers.

Late Athenian Coinage.—A new series, *Διονύσιος—Δημόστρατος*, of Athenian drachmas is established by J. SUNDWALL on the basis of a coin in the Löbbecke collection in the Berlin museum, in the light of which an attribution by Svoronos in *J. Int. Arch. Num.* 1904, p. 62, is corrected. In the specified series, and in that of *Δημοχάρης—Παμμένης*, we possess the latest products of the “newer Attic style.” Athens accordingly was still coining silver at the beginning of the Augustan period, but apparently not in the larger denominations (*Z. Num.* XXVI, 1907, pp. 273 f.; pl.).

Find of Coins of the Achaean League.—A. LÖBBECKE describes in detail in *Z. Num.* XXVI, 1907, pp. 275-303, a hoard of 499 silver coins, all but three of them triobols, all but fifteen from the Peloponnesus, and 322 of them coins of the Achaean league. The hoard is said to have been found in the winter of 1889-90 near Caserta, and is the first instance of the discovery of such a number of Peloponnesian coins together on Italian soil. Löbbecke shows reason to believe that the hoard dates from the year 146 B.C., and was perhaps buried by a returning Italian soldier.

Full-front Faces on Ancient Coins.—DR. EDDÉ advances the theory

that in the comparatively few cases where ancient coins depict a figure either full-front or to the left, it was to give an idea of terrifying, or imposing, or dominant energy. Human beings thus represented might be thought of as in the guise of demigods (*R. Ital. Num.* XXI, 1908, pp. 213-218).

Sicilian Coinage.—In *Num. Chron.* 1908, pp. 1-16 (pl.; fig.), ARTHUR C. HEADLAM describes an unpublished variety of Syracusan tetradrachm, shows its connection with one of Gela, and argues that the beginnings of the period of finest Sicilian art, and of the signed coins, should be put about 420 B.C., and that the coinage of Gela, Leontini, and Syracuse under Gelon and Hieron was a dynastic rather than a city coinage. An unpublished copper coin of Syracuse (youthful Pan¹ syrinx within wreath), of the fourth or fifth century is also described, and suggestions made as to the series to which it belonged.

Hector on a Coin of Stectorium.—In *Klio*, VIII, 1908, pp. 489-492 (fig.), K. REGLING publishes a coin of Stectorium, Phrygia, bearing the head of M. Julius Philippus on the obverse and a warrior advancing with one foot on the prow of a ship on the reverse. The latter figure is interpreted as Hector about to burn the ships of the Greeks.

GENERAL AND MISCELLANEOUS

Cretan Palaces and the Aegean Civilization.—In *B.S.A.* XIII (Session 1906-1907), pp. 423-445, D. MACKENZIE continues his discussion of early Aegean civilization (*Ibid.* XI, pp. 181-223; XII, pp. 216-258; *A.J.A.* XI, p. 211; XII, p. 230). He emphasizes the underlying unity of race of the builders of the Palaces at Tiryns and Mycenae and the people of the latter part of the Late Minoan Age in Crete, as well as the continuity of development in Crete from the preceding to the Late Minoan period. The invaders of Crete at this time, who ushered in the Late Minoan period, were a kindred race to the Middle Minoan Cretans. They were Pelasgians, and at this time there was a general migration of Pelasgians in the Aegean. In the immediately succeeding period, in spite of the survival of tomb-types and some burial customs, there is a sudden incursion of non-Cretan and continental types in different industrial arts. This was due to the invasion of Achaeans. The pottery which "comes into the same context as that found with the Warrior Stele of Mycenae is as yet entirely free of the Geometric spirit" and belongs to this period. In the following period the "Geometric" spirit in the style of decoration is dominant. This change is the result of the invasion of the Dorians. These results are attained by examination and discussion of palaces, pottery, and other monuments.

Inscribed Signs on Building Blocks from Cnossus and from Padua.—In *R. Stor. Ant.* XII, 1908, pp. 59-61, FEDERICO CORDENONS makes some observations with regard to the signs inscribed on Minoan building blocks. He does not agree with Dr. Evans that these signs had religious significance, but, following Professor Adolf Reinach (*R. Et. Gr.* 1905), regards them as stone-cutters' marks. They belong to the pre-historic Cretan alphabet, but remained in use after this system of writing had been abandoned. As first evidence in support of this theory, he states the fact that in the lower courses of an ancient tower at Padua, several blocks are inscribed with signs like those found in Crete; they date from

the Augustan period. Fourteen years ago the author had shown that the system of writing, used in the neighborhood of Padua and Venice until the Roman period, was of an archaic and Asiatic type, and had preserved numerous instances of a syllabic system. Survivals in the fields of art and dress confirm this early connection with the eastern Mediterranean.

The Monument of the Septem at Delphi. — In *Klio*, VIII, 1908, pp. 186-205 (pl.; 5 figs.), H. POMTOW and H. BULLE continue their discussion of the monuments of Delphi (*A.J.A.* XI, p. 468; XII, p. 232) with a paper on the Septem. The dedicatory inscription of this monument was copied by Dodwell, but was afterwards lost. It is now in the museum at Delphi, and a correct reading of it is as follows: [Ε]πίδδαλος τόπόλλ[ον] | Βοιάτιος : ἐχς Ἐρχομ[ενὸν] | [Λ]υπαρόδορος : Ἀριστογ[ίτον] | ἑποισάταν : Θεβαίο. The forms of the letters show that it must date from the middle of the fifth century. Pomtow believes with Robert that the battle of Oenoe which the offering commemorated was fought in 456, and that this monument was set up as an answer to the boastful inscription upon the golden shield dedicated by the Spartans at Olympia for the victory at Tanagra in 457. It probably dates, therefore, from 455-445 B.C. No part of it remains in place, but Bulle has found part of the base, which must have consisted of three steps and have been 9½ to 10½ metres long. The statues were those of the usual seven heroes, but there were probably only six in this group. Amphiaras with his chariot and horses, his charioteer, and Alitherses formed a group by themselves. Pomtow thinks that the Alitherses mentioned by Pausanias is to be identified with Halimedes and that he was perhaps the seer of Amphiaras. The latter was, therefore, represented as about to set out. Some slabs are still in place just east of the monument of the Epigoni, which probably belonged to this group.

The Monument of the Epigoni and the Offering of the Tarentines at Delphi. — In *Klio*, VIII, 1908, pp. 302-337 (pl.; 4 figs.), H. POMTOW and H. BULLE discuss the monument of the Epigoni and the offering of the Tarentines at Delphi. The monument of the Epigoni was a semicircular structure without a high back wall. The entrance was from the east. It contained eight statues, not standing in a row, but arranged in groups. It was erected in 369 and was a pendant to the monument of the Argive kings across the road. The artist was probably Antiphanes. At the time the Wooden Horse was erected this site was probably occupied by small offerings.

The offering of the Tarentines was on the south side of the way between the monument of the Epigoni and the treasury of the Sicyonians. Part of the dedicatory inscription, ΞΔΕΚΑΤΑΝ, still exists. The reconstruction is purely hypothetical, but it probably consisted of figures of women and horses placed upon a three-stepped base. It dated from about 480 B.C.

The Location of Ithaca. — In his *Ithaque, la grande* (Athens, 1908, Beck and Barth; 38 pp.; map), A. E. H. GOEKOOP undertakes to prove that the Homeric Ithaca was located in southern Cephallenia. He follows Bérard in treating the Iliad and the Odyssey as if they were historical documents, and arrives at his conclusions after an examination of all the passages referring to Ithaca and to the neighboring regions.

The Battle of Salamis. — In *Klio*, VIII, 1908, pp. 477-486 (map), K. J. BELOCH discusses the site of the battle of Salamis. He argues that

Psyttaieia is to be identified with Hagios Georgios, not with Lipsokoutali, which he thinks was the ancient Ceos. The battle was fought within the straits. The Persian line extended from Cynosura to the Arsenal, a distance of about 6 km. Allowing 25 m. to a ship will give 240 ships for the front line. The second line must have had nearly as many. The troops were landed on Psyttaieia preparatory to crossing over to Salamis.

The Acropolis of Athens.—In his new book on the Acropolis of Athens, Professor D'Ooge gives a history of the Acropolis from the earliest times to the present day, a description of the ancient monuments, and a discussion of the questions relating to them. Ancient and modern descriptions and the results of recent investigations are fully utilized. Appendices treat of (I) Sources, Pausanias, and Bibliography, (II) The Pelasgicon in the Age of Pericles, and (III) The Problem of the Old Athena Temple or Hecatompodon. Professor D'Ooge does not believe that the Old Temple continued to exist throughout antiquity, nor does he accept the view that the ancient fortifications of the Pelasgicon were preserved in the age of Pericles, but the arguments for the divergent theories are fully presented. The book is the most complete work on the Acropolis which has appeared. (*The Acropolis of Athens*, by Martin L. D'Ooge, New York, 1908, The Macmillan Company, xx, 405, v pp.; 9 pls.; 7 plans; 134 figs. 8vo. \$4.00 net.)

From the Acropolis to the Altis.—In his little book, *Ἀπὸ τῆς Ἀκροπόλεως εἰς τὴν Ἄλτιν* (New York, 1908, ἐκ τοῦ τυπογραφείου τῆς Ἀτλαντίδος, 103 pp.; 11 pls.), S. PAGANELES gives an account of a journey by sea from Athens to Olympia together with a description of the ruins in the Altis. The book is made up largely of the impressions made upon the author by the scenery of Greece with its historic background, and by Olympia and its monuments.

Pelion and Magnesia.—A page of addenda to A. J. B. Wace's article on the topography of Pelion and Magnesia in Thessaly (*J.H.S.* 1906, pp. 143 ff.) is given in *J.H.S.* XXVIII, 1908, p. 337.

Mother Earth.—In *Jh. Oest. Arch.* I. XI, 1908, pp. 1-29, E. MAASS discusses some of the evidence for the worship of Mother Earth in Greece in historical times, and shows that several goddesses or nymphs may be traced back and identified with the primitive earth goddess. Such, for example, are Artemis Alphioia of Ortygia, Phyllonoe, and Oenoe. Furthermore the omphalos is a symbol of Ge and evidence for her worship.

The Egg in the Cultus of the Dead.—In *Arch. Rel.* XI, 1908, pp. 530-546 (pl.; 4 figs.), M. P. NILSSON discusses the significance of the egg in the cultus of the dead in antiquity. Egg-shells and the shells of ostrich eggs have often been found in graves in Greece and Etruria. Artificial eggs of terra-cotta and other materials have also been found, and representations of eggs on grave monuments are common. The reason for this is that the egg was believed to possess temporary life-giving power, like the blood offering of Odysseus, and was, therefore, a gift most acceptable to the dead.

Παρθενόν.—In *B.C.H.* XXXII, 1908, pp. 499-513, T. REINACH publishes a late inscription, probably from Aphrodisias, recording the dedication of "a new Παρθενόν." The word here, as well as in three other late inscriptions, designates the temple, or a part of the temple, of a goddess,—the

Mother of the Gods (twice), Artemis Leucophryene, and Demeter. None of these goddesses has a virginal character justifying the use of the term for her abode. In all four cases it designates a part of a sanctuary set apart for the use of maidens in the service of a goddess. Similarly the *Νυμφών* at Sicyon (Paus. II, 11, 3) is a part of the sanctuary of Demeter and Persephone set apart for young married women, *νύμφαι*. Thus the connection of the *Παρθενόν*, the west cella of the Parthenon, with the Athenian maidens who played such an important part in the Panathenaic festival (DÖRPFELD, *Ath. Mitt.* XXII, 1897, p. 170) is confirmed.

The Manumission of Slaves and the Condition of Freedmen in Greece.—In *La manomissione e la condizione dei liberti in Grecia* (Milan, 1908, U. Hoepli, xix, 464 pp. L. 12), A. CALDERINI discusses at length the manumission of slaves in Greece and their condition after obtaining their freedom. The author gives the history of manumission from Homeric times to the early centuries after the Christian era, the methods employed in liberating the slave, the price paid, the guarantees for the protection of the act, the time and place, etc. He also discusses the position of the freedman in civil life, his social position, his relation to the metics, and his occupations. The number of freedmen in Greece and those of them who became famous are also considered. A series of appendices deals with various acts relating to manumission in different parts of the Greek world.

The Shell from Phaestus.—A. DELLA SETA, in *Rend. Acc. Lincei*, XVII, 1908, pp. 399-444, sees in the sculptures on the shell found at Phaestus in 1901 additional evidence of the relations between the Cretans and the Assyrians (see *A.J.A.* XII, p. 466), and of a connection between their religions.

The Homeric Shield.—W. HELBIG, in *Rend. Acc. Lincei*, XVII, 1908, pp. 132-134, concludes that the Homeric shield was ordinarily a round one with a single hand-grip. This conclusion is based on the special mention of a shield with two hand-grips in N. 407, and is confirmed by the archaeological material bearing on the subject.

The Owl of Athena.—In *B.C.H.* XXXII, 1908, pp. 529-546 (2 pls.), E. POTTIER publishes a small Corinthian ointment vase in the form of an owl, recently acquired by the Louvre, and discusses the connection of the bird with Athena. It was not the distinctive attribute of the patron goddess of Athens until the middle of the sixth century, the reason for the association perhaps being its adoption as a symbol on Athenian coins, and the fact that it was connected with Athena Ergane, one of the most ancient cults in Attica.

Discus Throwing Again.—Certain vase paintings are used by E. PERNICE (*Jb. Arch. I.* XXIII, 1908, pp. 94-101; 3 figs.) to supplement or correct E. N. Gardiner's discussions of the action of throwing the discus, especially as to the *balbis* or starting ground (*J.H.S.* XXVII, 1907, pp. 1 ff.). This was marked out on the sand with a wand, was quite small, and limited the position of the right foot only, the left being free to swing farther forward if desired.

Lamps from Delos.—In *B.C.H.* XXXII, 1908, pp. 133-176 (2 pls.; 47 figs.), W. DEONNA publishes the lamps found during the French excavations at Delos. Two classes are distinguished: (1) Wheel-made lamps (six types), dating from the fifth to the second century B.C.

(2) Lamps formed in a mould (nine types), second century B.C. and later. An interesting specimen (figs. 39, 40) is in the form of a ship, with fifteen mouths on each side.

Forged Terra-cottas.—In *Le Musée*, V, 1908, pp. 171–182 (24 figs.), O. THÉATÈS discusses at length the subject of forged terra-cotta figurines. *See p. 433*

Attic Seals.—In *Cl. Phil.* III, 1908, pp. 399–407, R. J. BONNER discusses the use of Attic seals. Instances of the employment of public and private seals are collected and the legal aspects of the subject especially considered.

Tettix.—In *Jh. Oest. Arch. I.* XI, 1908, Beiblatt, cols. 87–96 (fig.). F. HAUSER again defends his interpretation of *τέττιξ* and *κρωβύλος* against Petersen (see *A.J.A.* XII, p. 233). He interprets the latter word as *Stirn-schopf*, and this meaning is sure. With this fixed his original explanation of *τέττιξ* must stand.

The Book Roll in Ancient Art.—In *Jb. Arch. I.* XXIII, 1908, pp. 112–124, T. BIRT replies to certain criticisms of his theories on the book roll in ancient art, reasserting the significance of certain ways of holding the roll, in the left or right hand, etc., and of the reading figures on funeral monuments. (See E. Pfuhl, *Jb. Arch. I.* 1907, pp. 113 ff.; *A.J.A.*, 1908, p. 445.)

The Original Manuscript of Herodotus.—The transposition of §§ 124–136 of Book II of Herodotus to a position just before § 100, which was suggested by B. Apostolides in 1898, so completely restores the confused order of the Egyptian dynasties that it should be accepted as a necessary correction. It is to be explained by the misplacing of two rolls that began with similar phrases, and it shows the average length of a roll to have been about equal to 223 lines of Sayce's text, with twelve rolls in Book II. There may have been a fanciful intention in the number of rolls, as in the number of books, and the well-marked divisions of the subject which correspond with the rolls suggest that the composition was deliberately adapted to such lengths. (W. M. FLINDERS PETRIE, *J.H.S.* XXVIII, 1908, pp. 275–276.)

ITALY

ARCHITECTURE

Prehistoric Monuments at Gesturi.—The *nuraghi* of the region of Gesturi, Sardinia, are described by A. TARAMELLI in *Not. Scac.* 1908, pp. 116–120 (see *A.J.A.* XII, pp. 470–471).

Monuments on the Appian Way.—In *Jh. Oest. Arch. I.* X, 1908, pp. 191–230 (11 figs.), G. PINZA discusses in some detail the remains of the funeral monuments near the fifth milestone of the Appian Way.

The Ara Pacis Augustae.—In *Jh. Oest. Arch. I.* X, 1908, pp. 175–190 (4 figs.), J. SIEVEKING discusses the newly found pieces of the *Ara Pacis Augustae* especially with reference to Petersen's restoration. He thinks they prove that the Villa Medici reliefs did not come from the altar, but from some other monument probably erected after the death of Augustus.

Doric Forms at Pompeii.—With regard to old Doric forms at Pompeii, A. MAR has two papers in *Röm. Mitt.* XXIII, 1908, pp. 78–106 (pl.; 6 figs.).

The Palace of Diocletian at Spalato.—In *C. R. Acad. Insc.* 1908,

pp. 423-434, J. ZEILLER gives with some detail an account of his examination of the palace of Diocletian at Spalato and corrects the restoration proposed by Adam.

SCULPTURE

Roman Reliefs in Corsica.—In *B. Soc. Ant. Fr.* 1908, pp. 171-172, E. MICHON gives an account of four Roman reliefs in the island of Corsica. One is at Meria. This was once the support for a table and is adorned with winged Genii. The second, which is at Luri, has four busts side by side. It dates from the time of the Antonines and is in poor condition. The other two are at Aleria. One of them has decorative designs and once belonged to some building. It is not later than the second century A.D. The other is adorned with two male busts and is of later date.

The Leafy Bust at Nemi.—In *Cl. R.* XXII, 1908, pp. 147-149, J. G. FRAZER discusses the bust found at Nemi in which are two heads back to back, one old and one youthful, with leaves on their necks (see *A.J.A.* XII, p. 235). He quotes with approval the theory of F. Granger that the artist intended to represent the *Rex Nemorensis*, the priest of Diana at Nemi. The older man would thus be the actual priest and the younger his youthful assailant. He thinks that the leaves are oak leaves and that he has here confirmation of his theory that the priest of Diana at Nemi personated the god of the oak.

The Capitoline Wolf.—In *Klio*, VIII, 1908, pp. 440-456 (2 figs.), E. PETERSEN discusses the bronze wolf at present preserved in the Palazzo de' Conservatori in Rome. There are breaks on both of the hind legs which a distinguished electrician, Professor G. Mengarini, shows were produced by lightning. Petersen, therefore, identifies this wolf with the wolf struck by lightning in 65 B.C. and mentioned by Cicero (*Cat.* III, 19) and other writers.

Fragments of Roman Reliefs.—Various scattered fragments of Roman reliefs, especially gable sculptures, are discussed by W. AMELUNG in *Röm. Mitt.* XXIII, 1908, pp. 1-10 (3 pls.; 2 figs.).

The Sculptures of the Vatican Museum.—In the second part of his catalogue of the sculptures in the Vatican Museum (*Die Sculpturen des Vaticanischen Museums*, Vol. II, Berlin, 1908, G. Reimer, 768 pp. 8 vo.; 83 pls. 4to. M. 30) W. AMELUNG maintains the high standard of the first volume. He describes in detail, with bibliography, the objects in the Belvedere, the Sala degli Animali, the Galleria delle Statue, the Sala dei Busti, the Gabinetto delle Maschere, and the Loggia Scoperta. A volume of 83 plates accompanies the text.

Provincial Reliefs.—A relief in limestone, dating perhaps from the first century B.C., at Amiternum is discussed by N. PERSICHETTI in *Röm. Mitt.* XXIII, 1908, pp. 15-25 (pl.; 3 figs.). It represents a funeral feast, and is compared by Persichetti with another provincial relief, also at Amiternum, depicting a funeral procession. Even more provincial reliefs from the neighboring Aquila are published by F. WEEGE, *ibid.* pp. 26-32 (4 figs.), examples of a rustic art with boorish humor.

VASES AND PAINTING

An Arretine Fragment in England.—In *Proc. Soc. Ant.* XXI, 1907, pp. 461-462 (fig.), F. HAVERFIELD publishes a fragment of Arretine ware

found at Bicester. Pieces of this kind of pottery are rarely found in England and such as have come to light have almost all been found in London.

Neoptolemus in Scyros.—In *Z. Bild. K. N. F.* XIX, pp. 312-315 (2 figs.), R. ENGELMANN offers an interpretation of a wall painting in the Naples museum (No. 1219 in the catalogue) which has not hitherto been understood. At the right is seated a lady beside whom are shield, spear, and a traveller's bag. At her feet sits a slave. Behind her stands a youth and in front of her two men, one of whom is bearded. In the background is a funeral monument. A fragment of another copy of this painting has recently been found in the house of the Amoretti in Pompeii, and beneath the older man is the name Φοῖνιξ. This enables the writer to identify the scene as Phoenix and Diomedes in Scyros begging Deidamia to let Neoptolemus go to Troy. The arms are those of Achilles and the monument a cenotaph erected to his memory.

INSCRIPTIONS

An Inscription from Aquileia.—In *Jh. Oest. Arch. I.* X, 1908, pp. 264-282 (3 figs.), A. VON PREMERSTEIN discusses and restores a fragmentary inscription from Aquileia, the first part of which was found in 1788 (*C.I.L.* V, 8270), and the second part in 1906. It was set up in honor of C. Sempronius Tuditanus, who, while consul in 129 B.C., defeated the Iapydes.

Inscriptions from Rome.—A large number of inscriptions found in Rome or the vicinity are discussed by G. GATTI in *B. Com. Rom.* XXXV, 1907, pp. 328-361.

Hadrian's *Lex de Rudibus Agris*.—In *Klio*, VIII, 1908, pp. 154-185, J. CARCOPINO discusses at length the criticisms of his publication of the *Lex Hadriana de rudibus agris* made by Mispoulet and Schulten. The readings and interpretations proposed by these scholars are examined in detail. The copy of the law found by Carcopino at Ain-el-Djemala was dated by him in the lifetime of Hadrian, and this date is reaffirmed.

The T. Furius Victorinus Inscription.—In *B. Soc. Ant. Fr.* 1908, pp. 123-125, A. HÉRON DE VILLEFOSSE publishes a brief note on the T. Furius Victorinus inscription restored by C. Huelsen (*Ausonia*, II, 1907, pp. 67-76; *A.J.A.* XII, p. 238). In line 11 he proposes in place of Huelsen's

..... PROC · PROVINCIAE
HISPANIAE *ci* T · *proc. xl.* GALL

the following :

..... PROC · PROVINCIAE
Astur IAE · ET · GALL

Inscriptions from Northern Africa.—In *Klio*, VIII, 1908, pp. 457-463, H. DESSAU discusses two inscriptions from northern Africa. One of them (*C.I.L.* VIII, 1206) concerns the colony Hippo Diarrhytus; the other is a military inscription found at Lambesis and discussed by Cagnat in *M. Soc. Ant. Fr.* 1894, pp. 35 ff.

A Latin Inscription from Ouled d'Agha.—The Latin inscription from Ouled d'Agha, northern Africa, discussed by R. ENGELMANN, *Berl. Phil. W.* 1907, col. 478, which reads *bide vive e bide possas plurima bide*, he now refers

to an original: *invide, vive, vide, possis ut plura videre*, a formula meant to divert the influence of the evil eye. (*Berl. Phil. W.* August 29, 1908.)

Epigraphic Bulletin.—In *R. Arch.* XII, 1908, pp. 331–352, R. CAGNAT and M. BESNIER, in their review of epigraphical publications (March–June), give the text of one hundred and four inscriptions (Greek and Latin), with notes on publications relating to epigraphy.

COINS

***Aes Rude* in Etruscan Tombs.**—In *Not. Scav.* 1907, pp. 665–675 (10 figs.), L. A. MILANI describes two finds of considerable numbers of bronze axes (*paalstabs*) and *aes rude* in Etruscan tombs, and upholds the funereal (Charon's fee) and monetary function of *aes rude* and *aes signatum* in Etruria in early times. The article, with its illustrations, is reprinted in *R. Ital. Num.* XXI, 1908, 443–458.

***Aes Grave* in Pre-Roman Sicily.**—In *Boll. Num.* VI, 1908, pp. 19 f., PAOLO ORSI publishes a brief account of pieces of Roman *aes grave* recently found in Sicily, the finds being interesting for their bearing upon the question of early relations between Sicily and Rome. In a letter based upon this article (*ibid.* pp. 93–97) E. J. HAEBERLIN raises the question whether these coins passed current at their indicated values, or were estimated simply by metallic weight, and ORSI adds some observations, and appeals for more attention to discoveries of *aes rude* by archaeologists working in Sicily.

Early Italian Coinage.—In *Z. Num.* XXVII, 1908, pp. 1–115, E. J. HAEBERLIN determines, on the basis of the extensive investigation of weights made by him, the origin and standard of the coinage-systems in use in Italy before the introduction of the Roman *denarius*-system. The first part of a discussion of Haeberlin's theory by C. F. LEHMANN-HAUPT follows in the same number, pp. 117–136.

Early Roman Gold Coinage.—An article in the *Corolla Numismatica* (London, 1906) by H. Willers on 'Die römische Goldprägung des Jahres 209 v. Chr.' gives E. J. HAEBERLIN an opportunity to change the purpose expressed in his 'Systematik,' and to set forth, in correction of Willers, his views of the latest Etruscan and earliest Roman gold coinage in *Z. Num.* XXVI, 1907, pp. 229–272 (pl.; figs.), instead of reserving them for his great work on the *aes grave*.

Roman Coins in Mysia.—In *Num. Chron.* 1908, pp. 440 f., F. W. HASLUCK adds the description of a few more coins to those published by him, *ibid.* 1906, pp. 26 ff.

Rare or Unpublished Roman Gold Coins.—Sixteen rare or unpublished Roman gold coins, ranging in date from 16 B.C. to the reign of Magnus Maximus (383–388 A.D.), from which an aureus is described with the mintmark AVG · OB, referring to the mint at London, then called Augusta, are published by Sir JOHN EVANS († May 31, 1908; this was perhaps his last work) in *Num. Chron.* 1908, pp. 85–101 (pl.).

Hoard of Roman Silver Coins.—At Casaleone (Venetia) a hoard of Roman coins was found in April, 1901, ranging in date from 268 to ca. 44 B.C. The *denarii* numbered 714 (60 dentellate), the *quinarii*, 317. No *sestertius* was found. All are described by L. RIZZOLI, Jun., in *Not. Scav.* 1908, pp. 91–97.

Hoard of Denarii of Antony at Delos.—In *R. Ital. Num.* XXI, 1908, pp. 239–243, M. BALERFELDT analyzes and discusses a hoard of 650 *denarii* found in August 1905, during the excavations of the French School at Delos (*A.J.A.* X, p. 105). Of the entire hoard 604 pieces were “legionary” *denarii* of M. Antonius. The belief that this coinage was issued very shortly before the battle of Actium “acquires more ample confirmation through this find.”

The Value of the Denarius.—L. CESANO, in *Rend. Acc. Lincei*, XVII, 1908, pp. 237–256, discusses the value of the denarius and the rate of interest in the time of Constantine, on the basis of an inscription discovered in 1906 at Feltre, the ancient Feltria. Incidentally it is pointed out that the *fabri* and the *centonarii* formed one *corpus*, and that *refrigerare* is used of the banquet in honor of the dead.

Rome and Germany.—FR. GNECCHI prints in *R. Ital. Num.* XXI, 1908, pp. 347–376 (3 pls.), a list of the Roman imperial coins that commemorate relations with Germany, and prefixes some general observations.

An Unpublished Paelignian Coin.—G. PANSA publishes in *R. Ital. Num.* XX, 1907, pp. 533–536 (fig.), a bronze belonging to the uncial series of the Paeligni, bearing the Janus-head on the obverse, and on the reverse a winged Victory crowning a trophy of arms, under which is *PAL* (for *PALACINV*, contr. *PAL-ACNV*, = Paelignus).

Face on the As of Hatria.—G. PANSA elaborates the suggestion of LUIGI SORRICCHIO in taking the face of an aged, bearded personage on the *as* of Hatria, with sleeping dog and *HAT* on reverse, to be that of Hadranus, or Hatranus, a divinity of war and fire among the Siculi, tutelary deity and founder of Hatria, a Siculan town. (*R. Ital. Num.* XX, 1907, pp. 517–537; pl.)

Capitoline Medallions.—C. SERAFINI publishes anew in *R. Ital. Num.* XXI, 1908, pp. 245–253 (pl.), four medallions in the Capitoline collection that were discovered in Rome in excavations by the Monte di Giustizia, on the Viminal, in 1876, and were first published by P. E. VISCONTI in *R. Com. Rom.* 1877, pp. 76–78. At the time of the earlier publication the medallions were covered by oxidation; they are now shown in a more perfect condition.

Use of Roman Medallions.—FR. GNECCHI reviews and combats, in *Boll. Num.* VI, 1908, pp. 77–81, G. PANSA's belief that the *medaglioni cerchiati* were made especially to adorn military standards (see *A.J.A.* XII, p. 241).

Roman Medallions with Dionysiac Types.—Seventeen medallions, all of Hadrian, Antoninus Pius, Marcus Aurelius, and the younger Faustina, and dating from 138 (?), 139, 145 or 146, and 153 (that of Faustina undated) are pictured and described by FR. GNECCHI, who remarks that the representation of Dionysiac scenes on these reverses forms the only exception to the uniform seriousness of types on Roman coins. He thinks the medallions struck to commemorate special festivals, including the marriage of M. Aurelius and Faustina, and the Dionysiac types to reflect the revival of Greek influences in that period (*R. Ital. Num.* XX, 1907, pp. 499–516; pl.; figs.).

Diverse Styles in Roman Coinage.—L. LAFFRANCHI continues in *R. Ital. Num.* XXI, 1908, pp. 199–212 (pl.), his series of articles on the styles of Roman coins, discussing how the coins of Valerian and Gallienus issued from the mints of Viminacium and Antioch.

Britannia on a Sestertius of Antoninus Pius.—The representation of Britannia on the early copper coins of modern England, beginning with the

reign of Charles II, may be inspired by that on a rare *sestertius* of Antoninus Pius described by F. A. WALTERS in *Num. Chron.* 1908, pp. 194-6.

Temple of Cybele on a Contorniate.—A cast medallion of seventeenth-century workmanship shows on the obverse a head of Lucilla with a legend of the younger Faustina, and on the reverse an enthroned Cybele adapted from a well-known coin of the elder Faustina. This same figure is seen depicted in front of a temple on the reverse of a rare contorniate, which temple is doubtless the temple of Cybele on the Palatine, reconstructed by Augustus. (KATHARINE ESDAILE, *Num. Chron.* 1908, pp. 56-61; pl.)

Tesserae with Numerals I-XVI.—FR. GNECCHI adopts with applause a suggestion of Professor David Eugene Smith, of Columbia University, that the series of imperial bronze *tesserae*, each with a numeral on the otherwise plain reverse, the highest being XVI, are simply tokens denoting each so many *asses*, the highest (XVI) equalling, therefore, a *denarius*. (*R. Ital. Num.* XX, 1907, pp. 515 f.)

Coinage of Carausius.—In *Num. Chron.* 1908, pp. 373-426 (5 pls.), PERCY H. WEBB continues his detailed analytic description of the coinage of Carausius.

False Attributions of Fourth-century Coins.—In *Num. Chron.* 1908, pp. 81-83, P. H. W[EBB] points out that "Helena, the wife of Crispus, must follow Fausta, the wife of Constantius II, into numismatic obscurity," Cohen's attribution of a *Fausta*, N. F. coin to Fausta, the wife of Constantine the Great, being surely correct.

Additions to Cohen's Lists.—EDMOND GOHL continues in *R. Ital. Num.* XX, 1907, pp. 537-574; XXI, 1908, pp. 387-430, his contributions of descriptions of Roman coins from the National Hungarian Museum at Budapest not found in Cohen.

GENERAL AND MISCELLANEOUS

The Early Aegean Civilization in Italy.—In *B.S.A.* XIII (Session 1906-1907), pp. 405-422, T. E. PRET examines the remains of early civilization, especially pottery, in Italy, and concludes that "firstly, South Italy and Sicily were, during the Neolithic and Early Metal period, in direct communication with various centres of the Aegean civilization, using the word in its widest sense. Objects were imported into, and perhaps imitated in, various parts of Italy, including the southeast coast, Sicily, Sardinia, and Liguria. The places most strongly pointed to are Hissarlik, the lower part of the Balkan peninsula, and perhaps Crete. . . . Secondly, the earliest civilization of the Neolithic period in South Italy is of an Aegean rather than an Italian type, and presents considerable affinities with that of Crete in particular. It is possible that both have a common origin and are due to branches of a single people. Thirdly, as in the Aegean so in Sicily, though nowhere else in Italy, the Early Metal period was marked by the appearance of painted pottery. Much of the design is native, derived from wicker-work, but some seems to point to the Balkan peninsula, while the technique was probably introduced from elsewhere in the Aegean."

The Date of the Servian Wall.—At the February (1908) meeting of the Archaeological Society of Berlin, P. GRAFFUNDER discussed the date of the Servian wall. On the strength of his measurements of the stones, which

showed the "Oscan" foot to prevail, alongside of the later "Roman" foot, introduced by the decemvirs, he refers the older portions of the wall to a date much earlier than that usually assigned, placing them before the Gallic invasion, — perhaps in the second half of the sixth century B.C. (*Berl. Phil. W.* November 7, 1908.)

The Present State of the Etruscan Question. — In *Klio*, VIII, 1908, pp. 252–262, A. KANNENGIESSER summarizes the recent literature upon the subject of the Etruscans. The philologists deny that they were an Indo-Germanic people, while the anthropologists affirm that they were. Most scholars who have treated the subject are inclined to identify them with the Pelasgians. Montelius and Woltmann even hold that they were Pelasgians driven out of the Peloponnesus by the Dorian invasion. Von Luschan connects them with the Armenians and believes that as a race they were spread over Europe south of the Alps. The Raeti were a branch of this race. The theory that the Carians, the Hittites, the inhabitants of the Caucasus, and the Etruscans belonged to the same race is held with some modifications by a number of scholars. Thomsen even thought he had found resemblances between Etruscan and the language of the Caucasus. Fick believes that in prehistoric times Greece and Asia Minor had a Pelasgian-Hittite population; and Kannengiesser points out that the suffix *-th* found in what are supposed to be Pelasgian words is common in Etruscan. There are, however, still writers like Carra de Vaux who believe in the Ural-Altai origin of the race and the connection of the language with Turkish. The chief difficulty in the investigation of the subject lies in the fact that there is no sure test for what is truly Etruscan and what was adopted by them from other peoples. It is hoped that the discoveries at Boghaz-Köi may help solve the problem.

The Siege of Gela in 405 B.C. — In *Rend. Acc. Lincei*, XVII, 1908, pp. 257–268, G. CULTRERA discusses the position of the Carthaginian encampment. Disagreeing with Schubring and with Holm, he places it at Capo Soprano, preferring to assume a lacuna in the account given by Diodorus rather than to admit a change in the course of the river.

The Value of the Fasti of the Early Roman Republic. — In *Rend. Acc. Lincei*, XVII, 1908, pp. 33–68, ETTORE PAIS arrives at the conclusion that the lists of the consuls and of the *trib. mil. cons. pot.* cannot be regarded as more authoritative than those of the dictators and the triumphs. None of these have more value for the history of the early republic than the *elogia* of the Forum of Augustus.

Problems in the Topography of Rome. — In *Mél. Arch. Hist.* XXVIII, 1908, pp. 233–282, in a paper entitled 'Les Origines du Forum,' A. PIGAN-101L discusses a large number of the most difficult problems of the topography of early Rome with the following results. The original Sacra Via, running almost exactly due east and west and passing along the south side of the existing Regia, formed the *decumanus* of the city at a stage in its growth before that of the Septimontium. This was the real Roma Quadrata, including the Palatine, the Arx, and the Oppius, and may be called *urbs trimontialis*, or Sabine Rome. The *cardo* intersected the *decumanus* at right angles, just west of the temple of Vesta. The fragment of tufa pavement, surrounded by part of a circular wall of travertine, which Piganiol identifies with the *puteal Scribonianum*, marks the point of intersection. This *cardo*

terminated at its southern end at the Porta Romanula which is thus placed on the *clivus Victoriae* above the precinct of Juturna, and on the north at the Porta Ianualis. This is identified with the temple of Janus Geminus, and is regarded as nothing more than a gate in the wall of the *urbs trimontialis*. It is placed near the northeast corner of the curia. By an ingenious process the date of the founding of Roma Sabina, if in the eighth century B.C., is calculated to have been the first or second of April, and the traditional date of the founding of the Palatine city, April 21, is explained as a transfer from the later stage of the city. The *iani* — *summus, medius*, and *imus* — were arches over the *decumanus* and *cardo* at their points of entrance into the Forum. Incidentally a number of other disputed points are settled provisionally, such as the sites of the *Trigillum Sororium*, the *domus regis sacrificuli*, the *domus Valeriorum*, the temple of the Penates, and the *sacellum Larum*.

Fragment 140 of the Marble Plan of Rome. — In *Mél. Arch. Hist.* XXVIII, 1908, pp. 225-228, P. BIGOT shows that fragment 140 (*F.U.R.* Jordan) of the marble plan of Rome belongs at the southeast corner of the porticus Pompei, and he identifies the rectangular structure marked on this fragment, just outside the porticus, with the *curia Pompei* in which Caesar was murdered.

The Recent Discoveries on the Palatine. — In *Rend. Acc. Lincei*, XVII, 1908, pp. 201-210, D. VAGLIERI replies to the criticisms of L. PIGNORINI in *Rend. Acc. Lincei*, XVI, 1907 (see *A.J.A.* XII, p. 474), maintaining his original opinion.

The Columbaria of Rome. — In *Klio*, VIII, 1908, pp. 282-301 (fig.), V. MACCHIORO discusses at length the columbaria of Rome. He enumerates 61 and explains their construction, origin, location, and relation to the population of the city.

The Shrine and Oracle at Palestrina. — In the light of recent discoveries at Palestrina, O. MARUCCI proves conclusively that the principal shrine and oracle were situated in the lower group of buildings, planted against the rock and adjoining the older forum. (*B. Com. Rom.* XXXV, 1907, pp. 275-324, 2 pls.; 2 figs.; cf. pp. 364-365.)

The Bronze Tripod from the Temple of Isis at Pompeii. — A comparison of styles and examination of details shows that the celebrated bronze tripod from the temple of Isis at Pompeii and now at Naples did not originally belong with the pan or tray that now stands upon it. Both may be Augustan, but the support is much finer, to be compared with the Hildesheim silverware, while the upper part resembles rather the Boscoreale treasure. In ancient times the tray was fitted in, by means of a supporting ring, below the proper top of the tripod, and the effect of the latter is much finer if its whole height is freely displayed. Many such separable tripods were used with flat table tops laid on them and not permanently fastened. This one is not made, as most of them are, to pull out and push together, for convenience in storing and to fit different tops. (*E. PERNICE, Jb. Arch. I.* XXIII, 1908, pp. 107-111; 4 figs.)

The Alexander Mosaic. — Further observations on the Alexander mosaic by E. PERNICE may be found in *Röm. Mitt.* XXIII, 1908, pp. 11-14.

Herculaneum. — In *Herculaneum Past, Present, and Future* (London, 1908, Macmillan and Co.; xxii, 324 pp.; 48 pls. \$5), C. WALDSTEIN and

L. SHOEBRIDGE discuss the topography of Herculaneum, the inhabitants of the district, the eruption of 79 A.D., the site since the eruption, the excavations already made, the objects found, and give a bibliography. The volume is the outcome of Professor Waldstein's scheme for a renewal of the excavations, and in one of the three appendices the authors publish the correspondence on this subject to date.

Roman Terrets of Bronze. — In *M. Soc. Ant. Fr.* LXVII, 1907, pp. 268–296 (5 figs.), A. HÉRON DE VILLEFOSSE discusses a number of objects of bronze, consisting of a short bar, usually square or polygonal, having on either side a ring which often has the shape of a swan's neck. He enumerates eighteen of these objects and concludes that they were placed upright upon the yoke of a chariot as a guide for the reins. In *B. Soc. Ant. Fr.* 1908, pp. 150–152 (fig.), A. MERLIN gives a brief account of the one found at Kasrin in Tunis.

Pila Muralia. — The finding of some heavy wooden weapons in the boggy soil next the Roman camp at Oberaden, Westphalia (*A.J.A.* XII, pp. 372, 478), has suggested the history of the word *pilum*. These somewhat primitive weapons, 1½–2 metres long, tapering to a point at each end, angular in section, and with a hand-hold at the middle, are, with the exception of the pointed ends, just like the huge kitchen pestle (*pilum*) seen in some Greek vase-pictures and statuettes, and undoubtedly took their name from that implement. When the invention of the iron head had greatly modified the form and use of the military *pilum*, the old wooden weapon was still occasionally used; and being especially adapted to the defence of a fortification, was distinguished as the *pilum murale*. Jove's thunderbolt seems to be an idealized form of the early *pilum*. (G. KROPATSCHECK in *Jb. Arch. I.* XXIII, 1908, pp. 79–94, pl.; 14 figs.)

Representations of the Roman Provinces. — In *Le Rappresentanze Figurative delle Provincie Romane* (Rome, 1908, E. Loescher and Co.; 86 pp.; 4 pls.; 12 figs. 8 fr.), M. JATTA examines in detail the pictorial representations of the Roman provinces. These are found chiefly on coins. He also discusses the origin and development of the types.

SPAIN

The Prehistoric Chronology of the Iberian Peninsula. — In *R. Arch.* XII, 1908, pp. 219–265 (6 figs.), J. DÉCHELETTE begins a study of the prehistoric chronology of the Iberian peninsula. He sketches the progress of knowledge of the subject, due to excavations, among which those of H. and L. Siret are of great importance. The theories published by L. Siret ('L'Espagne préhistorique,' *Rev. des questions scientifiques*, October, 1893, 'Orientaux et Occidentaux en Espagne aux temps préhistoriques,' *ibid.* 1907, 'Religions néolithiques de l'Ibérie,' *Rev. préhistorique*, 1908, Nos. 7 and 8) are refuted. The neolithic period in Spain corresponds to the Cycladic or Amorgan civilization in the Aegean, certainly not later than 2000 B.C., and has no connection with the Phoenicians. Vases from the Argar, between Carthagera and Almeria, correspond to early Minoan vases from Crete and belong to the bronze age, which therefore antedates by centuries the Celtic occupation. The influence of the civilization of the eastern Mediterranean regions is very marked. Many further details are discussed.

FRANCE

The Vase of Belloy.—In *R. Ét. Anc.* X, 1908, pp. 339-341 (pl.), H. BREUIL discusses the vase found at Belloy-sur-Somme and now in the museum at Amiens upon which are three representations of a flying bird. It dates from the end of the neolithic or beginning of the bronze age.

Two Gallic Vases.—In *R. Ét. Anc.* X, 1908, pp. 257-261 (2 pls.; 2 figs.), A. CARTIER publishes two Gallic vases in the museum at Geneva. They were found at Geneva about fifty years ago. In shape they are like the olla. The decoration consists of a painted design in black upon a red background with a band of white above and below. The design on one vase consists of a band of squares upon which birds and a lozenge-shaped pattern alternate; upon the other is a series of eleven birds. Gallic vases decorated with other than geometric designs are extremely rare.

Graffiti on Pottery of Allieux and Avocourt.—In *R. Arch.* XI, 1908, pp. 391-394, G. CHENET gives a list, with some facsimiles, of thirty-one graffiti on pottery from Les Allieux and of eight from Avocourt (Meuse).

Postcards Reproducing Roman Monuments in France.—In *R. Arch.* XII, 1908, pp. 266-277, J. DECHELETTE publishes a list of 247 postcards with illustrations after Roman monuments in France. This supplements the list of 188 cards published *ibid.* IX, 1906, pp. 329-335.

SWITZERLAND

Ancient Marbles in Geneva.—In *R. Arch.* XII, 1908, pp. 153-173 (17 figs.), W. DEONNA describes seventeen ancient marbles in Geneva. Thirteen are in the Musée Fol. They are: (1) A double herm representing (a) a bearded Hermes, type of the Hermes Propylaeus of Alcamenes, and (b) a youthful, long-haired Apollo; (2) a torso of a youth in Polyclitan style; (3) a head of Hermes, with wings, of Phidian type; (4) an Apollo Sauroctonus, much restored; (5) a male torso, replica, but without its exaggerations, of the Farnese Heracles; (6) head of the elder son of Laocoön, a copy probably of renaissance date; (7) an effeminate Dionysus head, with long hair and a wreath of grapevine; (8) head and torso of Aphrodite, originally in the attitude of the Venus de' Medici; (9) head of Aphrodite, Capitoline type; (10) torso of youthful Dionysus; (11) head of Flora, with wreath; (12) torso of an old man carrying a kid, very realistic, of the time of Augustus; (13) archaic female head, decorating the arm of a throne probably the same throne from which came the head in Copenhagen, *Glypt. Ny-Carlsberg*, pl. 17. In the Musée Archéologique is a limestone group of a centaur and a nymph, Cypriote work of the sixth century. In the Musée Rath are (1) a torso of Aphrodite, resembling the Aphrodite of the Vatican; (2) a male torso, excellent replica of the Pasquino; (3) a statue of Trajan, nude except for a chlamys, conceived according to the Polyclitan scheme. In *R. Ét. Anc.* X, 1908, pp. 250-256 (2 figs.), he discusses a marble head, probably of Aphrodite, in the Musée Fol. He dates it at the end of the fourth century and connects it with an ephebus head in Boston and a bronze head of Artemis in Naples. He also discusses a terracotta warming apparatus which is the best-preserved specimen of its kind. Both objects have been published before.

GERMANY

A Tomb of the Bronze Age at Anderlingen.—In *Röm.-Germ. Korrespondenzblatt*, I, 1908, pp. 46-47, DR. HAHNE reports briefly upon the prehistoric tomb found near Anderlingen (*A.J.A.* XII, p. 372). It dates from the bronze age (Montelius, Period II). The three human figures found on one of the slabs are about 50 cm. high, and in style and technique resemble figures found on monuments of the bronze age in Scandinavia.

The Castellum Lupiae flumini adpositum at Haltern.—Further excavations at Haltern i. W. (see *A.J.A.* XI, p. 365 and XII, p. 246) have determined the location of the praetorium of the *Feldlager*, through the discovery of the southern gate of the camp. The officers' quarters in the larger camp were not discovered, but in the course of the excavations a great amount of pottery was brought to light, which furnishes valuable material for the study of provincial ceramics from 11 B.C. to 16 A.D. Indications seem to point to a reoccupation of the larger camp by the Romans, and to this question special attention will be directed during the continuation, of the excavations. (H. DRAGENDORFF, *Röm.-Germ. Korrespondenzblatt*, I, 1908, pp. 75-77.)

AUSTRIA-HUNGARY

Palaeolithic Remains from the Gudenus Cave.—In *Mitt. Anth. Ges.* XXXVIII, 1908, pp. 277-294 (12 pls.; 9 figs.), H. OBERMAIER and H. BREUIL discuss the palaeolithic remains from the Gudenus cave near Krems on the Danube in lower Austria.

Palaeolithic Remains on the Bükkgebirge.—In *Mitt. Anth. Ges.* XXXVIII, 1908, pp. 232-263 (8 pls.; 19 figs.), O. HERMAN discusses at length the significance of the palaeolithic remains found on the Bükkgebirge near Miskolcz, Hungary.

The Warrior from Celeia.—In *R. Arch.* XII, 1908, pp. 115-119 (2 figs.), S. REINACH publishes the statue of an officer in the Roman army found about 1840 in the bed of the Voglena near Cilli (Celeia in Noricum) and now in the museum there. It was published by Conze in the *Denkschriften* of the Vienna Academy, 1877-78, Vols. XXVI-XXVII, pl. XII. The man was evidently a barbarian, but his Roman military costume proclaims him an officer. A bundle of cylindrical objects by his side is a set of book-rolls.

GREAT BRITAIN

A Barrow at Sunningdale.—In *Proc. Soc. Ant.* XXI, 1907, pp. 303-308, O. A. SHRUBSOLE describes the excavation of a barrow near Sunningdale Station and discusses the British urns found within it.

Neolithic Implements from Hampshire.—In *Proc. Soc. Ant.* XXI, 1907, pp. 263-266 and 462-463, W. DALE discusses certain neolithic implements from Hampshire in his collection.

Brooches of the Crossbow Type in Cornwall.—In *Proc. Soc. Ant.* XXI, 1907, pp. 372-374 (fig.), C. H. READ discusses two bronze brooches of the crossbow type found at Harlyn Bay, Cornwall, and shows that they are not of British type, but closely related to types found in the Iberian peninsula.

Water-clocks in Ancient Britain.—In *Proc. Soc. Ant.* XXI, 1907, pp. 319-333 (plan; pl.), R. A. SMITH discusses at length the use of water-clocks in pre-Roman Britain.

A Roman Wreck.—In *Proc. Soc. Ant.* XXI, 1907, pp. 268-291 (pl.; 6 figs.), R. A. SMITH discusses the wreck of a Roman boat loaded with Gallo-Roman pottery on Pudding-pan Rock in the Thames estuary. (See *Archaeologia*, V, pp. 282 ff.) The wreck dates from the second century A.D. The writer pays special attention to the potters' signatures.

Folk Memory.—In his *Folk Memory* (Oxford, 1908, Clarendon Press, 416 pp.; 36 figs.), W. JOHNSON discusses at length the remains and the lore of primitive man still to be found in Great Britain.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART

GENERAL AND MISCELLANEOUS

The Origin of Persian Faience.—In *Burl. Mag.* XIII, 1908, pp. 134-143, E. AGNES R. HAIGH argues that the ceramic art of mediaeval Persia was a native growth and developed from an earlier art derived from survivals of the Mycenaean. The Persian faience was introduced into Damascus and Rhodes at the beginning of the sixteenth century, at the time of their conquest by the Ottoman Turks, whose only culture was that which the Persianized Seljuks had taught them. In Rhodes this art developed special features recalling the ancient Rhodian ware of the seventh century B.C., due perhaps to the survival of a local tradition.

The Mosque of Makam Ali.—In *Jb. Preuss. Kunsts.* XXIX, 1908, pp. 63-76, F. SARRÉ discusses the mosque of Makam Ali on the road from Bagdad to Damascus. He compares it with the mosque of Ibn Tulun in Cairo, and because of the resemblance of some of its details to gold medals of the Califs of the tenth century he assigns this date to the building.

Nonna and Stephanus of Aila.—In *B.C.H.* XXXI, 1907, p. 420, C. CLERMONT-GANNEAU comments briefly on the possible identity of Nonna, wife (?) of Stephanus, architect of the Church of Justinian at Sinai (cf. *ibid.* p. 332), and the Nonna of an epitaph of Beersheba.

The Church of the Holy Sepulchre and the Church of the Apostles.—In his *Grabeskirche und Apostelkirche* (Leipzig, 1908, J. C. Hinrichs'sche Buchh. I: vi, 234 pp.; 14 pls.; 14 figs. II: vi, 284 pp.; 10 pls.; 3 figs. M. 40), A. HEISENBERG discusses at length two important churches of the time of Constantine. In volume I he recounts the history of the Church of the Holy Sepulchre at Jerusalem and explains the changes which it has undergone. In volume II he discusses in a similar way the Church of the Apostles in Constantinople and its mosaics. The different scenes are examined in detail.

Bithynica.—In *B.S.A.* XIII (Session 1906-07), pp. 285-308 (12 figs.), F. W. HASLUCK describes, with historical discussion, Byzantine churches and fortresses in Bithynia, and publishes nine inscriptions, all apparently of late date. At Triglia the church of St. Stephen is of the cross-in-square type, with two (originally three) apses. It was probably built about 800 A.D. The church of Pantobasilissa, of the cross-in-square type, now much restored, is famous for its cures of cripples: patients incubate three days,

fasting. The monastery churches of Medikion and Pelekete, near Triglia, are now almost entirely modern. At Syge the Church of the Archangels is also an incubation sanctuary. Of the original church (780 A.D. according to the inscription) only the compartment roofed by the great dome and the single apse remain. The rest is modern. The Byzantine fortresses of Caesarea, Katoikia (Kete), and Konbouklia are historically, rather than architecturally, interesting. On the island of Kalolimno (ancient Besbicus), opposite the mouth of the Rhyndacus, is the monastery of the Metamorphosis. Of the original church only the fine pavement of colored marble



FIGURE 4.—THE NATIVITY. CHAPEL OF ST. BARBARA.

remains. The present building, probably of the sixteenth century, is of very rough construction.

Subterranean Chapels in Cappadocia.—In *R. Arch.* XII, 1908, pp. 1-32 (3 pls.; 4 figs), G. DE JERPHANION describes in general two groups of subterranean chapels, one at Soghanle, the other at Gueureme, in Cappadocia (see *A.J.A.* XII, p. 379), and gives a detailed description of the chapel of St. Barbara at Soghanle, and that of the Ascension at Gueureme. Both are Byzantine churches in their architectural forms, though carved from the solid rock. The chapel of the Ascension has nine domes. Both are decorated with elaborate series of paintings of biblical scenes and saints. The chapel of St. Barbara, with its paintings, is dated probably between 976 and 985 A.D. The paintings show the style of the great art of the period, but the execution of an unskilful painter (Fig. 4). The paintings in the chapel of the Ascension date from the eleventh century, but an earlier decoration under them shows that the chapel itself antedates the paintings by some years at least.

The Origin of the Rectangular Nimbus. — In *M. Soc. Ant. Fr.* LXVII, 1907, pp. 55-71, P. LAUER discusses the origin and use of the rectangular nimbus. The earliest example about which there is no dispute dates from the eighth century. It was used from the eighth to the thirteenth century, and especially during the ninth century in Rome, where it was always the sign of some great person, pope or emperor, who was then living or only recently dead. It was not employed by the Byzantines, and seems to have been adopted by the popes to meet the criticism of the iconoclasts.

The Symbols of the Evangelists. — The symbols of the Evangelists do not appear in Byzantine art until after the beginning of the Crusades. On the other hand they can be traced in Western monuments as early as the end of the fourth century. The Durham Book, known to be a copy, in part at least, from a manuscript produced in the neighborhood of Naples, probably owed to this prototype its pictures of the Evangelists. In these the figures of the Evangelists are inscribed in Greek, *ὁ ἄγιος Μάρκος*, etc., but the symbols all have a Latin inscription, e.g. *imago leonis*, for the lion. Such evidence points to a purely Western origin for the symbols, which were then carried into Byzantine art by the Crusades. (J. A. HERBERT, *Burl. Mag.* XIII, 1908, pp. 162-167.)

Sassanid and Byzantine Silks. — In *Gaz. B.-A.* XI, 1908, pp. 471-493, G. MIGEON argues that Sassanid silks are to be distinguished from Byzantine by a fondness for movement. The mounted bowman, the circular frames enclosing the patterns, the heraldic repetition of the same *motif* are characteristic; while the fire altar and the tree of life are favorite *motifs*. A list of Sassanid silks in European museums and a classification of the motifs in Byzantine silks is added.

Mediaeval Fortresses of the Northwestern Peloponnesus. — In *B.S.A.* XIII (Session 1906-07), pp. 268-284 (6 figs.; 2 pls. of 6 figs. each), R. TRAQUAIR describes, with brief historical accounts, the mediaeval fortresses of Karytaena, Clarenza, Katakolo, Castel Tornese, Patras, and Kalavryta. A note is added on 'The Armorial Insignia in the Church of St. George, at Geraki.'

Fibulae from Ukraine. — In *B. Soc. Ant. Fr.* 1908, pp. 191-193, Baron J. DE BAYE discusses the fibulae found from time to time at Ukraine and now at the University of Kiev and in various private collections. He divides them into four classes, the earliest of which is attributed to the Goths.

The "Rök" Stone of Ostergötland. — In his *Bidrag till Tolkning af Rök-Inskriften* (Upsala, 1908, Almqvist and Wiksells Boktryckeri-A.-B. 34 pp.; fig.), H. SCHÜCK discusses the "Rök" inscription in Ostergötland, Sweden.

A Donatist Church at Seriana. — In *C. R. Acad. Insc.* 1908, pp. 308-310, P. MONCEAUX publishes the following inscription from a church at Seriana, northern Africa: *Dignis digna. Patri Argentio coronam Benenatus tes(s)el(l)avit*. He argues that the Argentius is to be identified with a Donatist bishop mentioned in the conference at Carthage in 411 and called Recargentius in the records. We thus have a Donatist inscription in a Donatist church.

ITALY

Excavations in the Cemetery of Priscilla. — In *Le Musée*, V, 1908, pp. 187-204 (plan; 4 figs.), O. MARUCCI gives an account of the excava-

tions in the cemetery of Priscilla extending from November 1905 to June 1907. (See *A.J.A.* XI, pp. 123 and 377.) In *Bull. Arch. Crist.* 1908, pp. 1-125, he publishes in detail his conclusions as to the so-called basilica of St. Silvester, the name of which he shows to be purely conventional, as the buildings are older than Silvester. The tombs of Felix and Philip have been located. He publishes with commentary the inscriptions and argues that the *sedes ubi prius sedit sanctus Petrus* was in the cemetery of Priscilla, — a conclusion accepted by DEWAAL in *Rom. Quart.* 1908, pp. 42-51.

The Monuments of Christian Rome.— In a recent volume of the *Handbooks of Archaeology and Antiquities*, published by the Macmillan Company, A. L. FROTHINGHAM furnishes a welcome account of the artistic life of Rome from the time of Constantine until the withdrawal of the popes to Avignon. The first part (pp. 17-151) sketches in eight chapters the history of the city and its monuments during this period. The second part (pp. 154-384) treats of basilicas, campanili, cloisters, civil and military architecture, sculpture, painting, Roman artists, art in the Roman province,



FIGURE 5. — FRESCO IN THE CATACOMB OF PRETEXTATUS.

and the artistic influence of Rome. An Index List of Churches contains an account of churches not treated in the text. (A. L. FROTHINGHAM, *The Monuments of Christian Rome from Constantine to the Renaissance*. New York, 1908, The Macmillan Co.; 412 pp.; 159 figs.; 8vo. \$2.25.)

The Crowning with Thorns.— The well-known fresco in the catacomb of Pretextatus, usually interpreted as the crowning of Christ with thorns (Fig. 5), is shown by O. MARUCCI (*N. Bull. Arch. Crist.* 1908, pp. 131-142) to represent the scene on the day after the baptism when John hailed the Saviour with the words, "Behold the Lamb of God that taketh away the sins of the world." The picture forms a suite with the Samaritan Woman at the Well and the Resurrection of Lazarus. All three incidents are found in the fourth Gospel only.

SPAIN

The Tympanum of S. Isidro at León.— The Romanesque tympanum of S. Isidro at León (Fig. 6) is carved with a medallion ornamented with the *Agnus Dei* and supported by two angels. Two other angels appear, one on either side of this central composition. Below the medallion is shown the sacrifice of Isaac, an angel pointing to the ram appearing on Abraham's left, and his two servants with the ass to the right. Another figure, either Sarah or another angel, completes the composition to the right. The hand

of God issues from clouds to the left of the head of Abraham. To the left of the central group, we find a standing figure, followed on the left by a horseman who turns in his saddle to aim an arrow at the Lamb of God. P. MAYEUR, in *R. Art Chrét.* 1908, pp. 250-253, explains the whole composition as the artistic expression of a symbolism contained in the writings of Honorius of Autun and Walafrid Strabo, whereby the sacrifice denotes the Passion, and the three days of Abraham's journey to Mt. Moriah, the three ages of the Jews, (1) from Abraham to Moses, (2) from Moses to St. John Baptist, (3) from the Baptist to Christ. These three periods are represented in the tympanum by (1) Abraham's sacrifice; (2) Isaiah, represented



FIGURE 6.—TYMPANUM OF S. ISIDRO AT LEÓN.

by the standing figure, to the left, and (3) the *Agnus Dei*. The horseman is the mystic horseman of the Apocalypse, i.e. Death.

FRANCE

Proportions of French Sculptures of the Twelfth Century.—In *R. Arch.* XI, 1908, pp. 331-358 (3 figs.), JEAN LARAN continues (cf. *R. Arch.* IX, 1907, pp. 436 ff.; *A.J.A.* XII, 1908, p. 250) his treatise on proportions in French sculpture of the twelfth century, discussing the laws of grouping. He tabulates seven different proportions for each figure, arranges the resulting numbers in series (method of seriation), applies Gauss's law of the probability of errors, and finds that the proportions are subject to constant laws, which act with such continuity as to make possible an attempt to arrive at the causes of the variations.

Bas-relief at Monaco.—In *R. Arch.* XII, 1908, pls. 118-124 (fig.),

S. REINACH publishes a relief found near Monaco (cf. *C. R. Acad. Insc.* 1902, p. 494, *Revue Africaine*, 1908), and now in the museum at that place. He offers as an interpretation the healing of scrofulous persons by a king of France. Of two inscriptions on the stone, one may be MA[r]iac, the other seems to be LODOUIC.

Lothair's Jewel.—In *B. Soc. Ant. Fr.* 1908, pp. 102–107, PH. LAUER discusses the jewel of Lothair II, king of Lorraine, now in the British Museum. The chief incident in the king's life was his unsuccessful attempt to divorce his wife Tetberga, who was childless. The queen was accused of unchastity, but the bishops of Cologne and Trèves defended her, and the king was forced to acknowledge her innocence at the assembly of Vendresse in 865. The jewel was probably one of the gifts made to her by the king at that time, hence the choice of the Susanna scenes for the decoration.

The Signatures of Painters in Mediaeval Manuscripts.—F. DE MÉLY discusses in *M. Soc. Ant. Fr.* LXVII, 1907, pp. 16–54 (5 pls.; fig.), the signatures of the painters of illuminations in mediaeval manuscripts. Thirty-six signatures from Villard de Honnecourt in 1241 to Godefroy le Batave in 1519 are examined. Six of them are new discoveries by the author.

Embroideries in the Museum at Tulle.—R. FAGE, in *M. Soc. Ant. Fr.* LXVII, 1907, pp. 231–245 (3 pls.), discusses three pieces of embroidery from the chapel at Chambon, now in the museum at Tulle. The subjects of the two most important are the Adoration of the Magi and the Presentation in the Temple. These are companion pieces, each 52 cm. long and 28 cm. high, and date probably from the fourteenth century. They are Italian and very likely Florentine. The third piece is 38 cm. wide and 39 cm. high, and has eight figures of saints separated by branches and leaves. This is English and also dates from the fourteenth century; but it is made up of fragments sewn upon a seventeenth-century background. All three pieces are of great value and would be an honor to any museum.

BELGIUM AND HOLLAND

Iconography of the Cathedral at Bois-le-Duc.—The curious little figures which are seated astride the buttresses of the nave of the cathedral at Bois-le-Duc, representing artisans, musicians, the Magi, etc., are doubtless meant to convey the image of humanity seeking salvation in the church. The figures which adorn the spandrels of the windows opening into the lateral and choir chapels compose scenes from the life of the Virgin. The pairs of knights which here and there occur have a reference to the procession of the *Frères de la Passion*, who marched thus to perform the mysteries of the Passion, while a priest recited the incidents thereof to the people. Another series of groups are Old-Testament types of scenes in the life of Christ. Still others are less consistent with the symbolical thread which was in general followed throughout these sculptures, inasmuch as they represent the Duke of Brabant and his duchess, nobles and dames, musicians, etc. This portraiture is carried out in the terminal figures of the roof, two of which represent Emperor Maximilian and a prince of Brabant. Here the artist may have had a conception of these personages

as protectors of the Church. (C. F. X. SMITS, *R. Art Chré.* 1908, pp. 300-315.)

The Birthplace of Claus Sluter. — The name Sluter, as well as that of his nephew and favorite pupil Claus de Werwe, is found in fourteenth-century records of Guelderland, and the epitaph of the latter, preserved in a manuscript of the Bibliothèque Nationale, speaks of him as from Hatheim, i.e. Hattem, a village of the same province. Claus Sluter was probably, therefore, also Dutch in origin. That he was of Guelderland itself seems to be shown by the fact that the name Sluter, which is equivalent to the Latin *clariger*, is pronounced Sluiter in Dutch proper, while the dialect of Guelderland makes it Sluter. (H. CHABEUF, *R. Art Chré.* 1908, pp. 340-342.)

SWITZERLAND

The Carolingian Frescoes in the Münster at Graubünden. — In *Monatshfte f. Kunstwiss.* I, 1908, pp. 387-401, A. SCHMAROW shows that the frescoes in the Münster at Graubünden belong to the school which produced the paintings in the cupola at Aachen now lost. The excellence of the work lies in the free interworking of drawing and color. Antique tradition is preserved in the architectural backgrounds and in the unity of the proportions of the figures. The superiority of these frescoes to those of S. Maria Antiqua and to the Carolingian mosaics at Rome throws new light on the disseminating centre of Carolingian art.

GREAT BRITAIN

The Influence of England in the Development of Gothic Art. — In *Le Musée*, V, 1908, pp. 139-160 (12 figs.), C. ENLART shows that the part played by England in the development of the Gothic style was much more important than has been supposed. At the end of the fourteenth century artistic work of four classes was imported into France from England: carved alabaster figures; embroideries; miniatures, and architectural forms. England furnished the elements of the flamboyant style in architecture, and English influence is apparent in cathedrals in France, Spain, and Portugal.

Mottisfont Priory. — In *Proc. Soc. Ant.* XXI, 1907, pp. 339-349 (plan; 10 pls.), W. DALE and C. R. PEERS discuss at length Mottisfont Priory, many parts of which still exist built into an eighteenth-century dwelling.

The Judgment Porch and the Angel Choir in Lincoln Minster. — In *Archæologia*, LX, 1907, pp. 379-390 (3 pls.; 2 figs.), W. R. LETHABY discusses in some detail the Judgment Porch and the Angel Choir in Lincoln Minster. In the middle of the tympanum of the south porch is a quatrefoil surrounding the Christ who is accompanied by two angels. Around the quatrefoil are seven more angels beautifully arranged. The inner architectural order contains six female figures probably Virgins and six male figures probably English King-martyrs. The outer order has the Wise and the Foolish Virgins, eight in number, at the left; and at the right, eight men, probably Apostles. Below the tympanum are four figures, two on each jamb. The inner pair represent the Church and the Synagogue; the outer pair probably Apostles. The Majesty with attendant angels in the Angel Choir closely resembles these sculptures.

The Almery of the Abbey Church at Selby. — In *Archaeologia*, LX, 1907, pp. 411-422 (2 pls.; 3 figs.), W. H. ST. JOHN HOPE describes the fifteenth-century almery destroyed by the burning of the Abbey Church at Selby, October 20, 1906, and discusses this class of monuments.

The Episcopal Ornaments of William of Wykeham. — In *Archaeologia*, LX, 1907, pp. 465-492 (10 pls.; 8 figs.), W. H. ST. JOHN HOPE describes at length the episcopal ornaments of William of Wykeham, Bishop of Winchester, 1367-1404; of William of Waynfleet, Bishop from 1447-1486; and of certain bishops of St. Davids. The objects date from the thirteenth and fourteenth centuries. See *Proc. Soc. Ant.* XXI, 1907, pp. 483-485.

Table Knives of the Fourteenth Century. — In *Archaeologia*, LX, 1907, pp. 423-430 (pl.; 3 figs.), O. M. DALTON describes a set of ornate table knives in the British Museum made for John the Intrepid, Duke of Burgundy.

Palimpsest Brasses. — In *Proc. Soc. Ant.* XXI, 1907, pp. 422-430, M. STEVENSON publishes seven palimpsest brasses.

Mediaeval Embroideries. — In *Proc. Soc. Ant.* XXI, 1907 (pl.; 7 figs.), W. R. LETHABY describes the embroideries in the British and South Kensington museums which antedate the middle of the fourteenth century.

RENAISSANCE ART

GENERAL AND MISCELLANEOUS

An Enamelled Head Stall. — In *Proc. Soc. Ant.* XXI, 1907, pp. 376-380 (4 figs.), O. M. DALTON describes an enamelled head stall of the early sixteenth century now in the British Museum.

Portraits of Michelangelo. — E. STEINMANN contributes to *Monatshefte f. Kunstwiss.* 1908, p. 651 (frontispiece), a detail of Jacopo del Conte's picture in the oratory of S. Giovanni Decollato at Rome, which contains a portrait of Michelangelo. Another portrait of the master is found by A. L. MAYER, in the head of St. Luke in the picture of the Valencia museum, by Francesco Ribalta, representing St. Luke painting the Virgin. (*Ibid.* p. 656.)

The Portrait-busts of Francesco del Nero. — E. STEINMANN identifies the bronze bust of Francesco del Nero, treasurer of Clement VII, which is in the Kaiser-Friedrich Museum at Berlin, with the portrait *fatta di marmo* mentioned by Vasari as the work of Giulio Mazzoni. He believes that Vasari spoke of the bust as "of marble" because he confused it with its replica in the marble tomb of Francesco del Nero in S. Maria Sopra Minerva at Rome. (*Monatshefte f. Kunstwiss.* I, 1908, pp. 633-637.)

Rembrandt and Lastman. — The influence of Lastman, Rembrandt's teacher, upon the greater master is illustrated by the comparison made by W. BÖSE in *Ber. Kunsts.* 1908, cols. 58-65, in which he shows that an early drawing of Rembrandt's in the Kupferstichkabinett at Berlin is copied from Lastman's Susanna in St. Petersburg. This drawing belongs to a series of sketches for the Susanna which Rembrandt painted in 1647, now in the Berlin gallery, which shows an immense improvement over Lastman's treatment, but still retains his composition and many of his details. The article closes with a sketch of the evolution of the Susanna motif in Rembrandt's art.

Notes on Rembrandt. — In *Rep. f. K.* XXXI, 1908, pp. 159-167, N. RESTORFF brings out the fact that Rembrandt, together with others of his contemporaries, harked back to earlier methods in many of his pictures. As instances of this archaism he notes the occasional use of smaller dimensions for less important figures, and the direct gaze at the spectator which characterizes some of the personages in his scenes. He also points out the influence of Michelangelo on Rembrandt, particularly in the engraving, Abraham's Sacrifice, where the figure of Abraham is a modified version of the Moses. Similar borrowings may be noted from Raphael and Savoldo.

Pictures by Various Masters. — W. SNIDA contributes to *Monatshefte f. Kunstwiss.* I, 1908, pp. 305-307, a series of notes on the *oeuvre* of various families. He adds to Sirén's list of Lorenzo Monaco's works a Madonna, dated 1405, in the Turin gallery, a kneeling Virgin (half of an Annunciation) in Castle Mödling in Lower Austria, and a "Hermits of the Thebaid," in the Budapest gallery, only half of which is preserved. The picture is the original from which the well-known version in the Uffizi, ascribed to Pietro Lorenzetti, was copied. He notes "with astonishment" that Berenson (*North Italian Painters*) has omitted from his list of Parentino's works the frescoes in the Cloister of S. Giustina, at Padua, and adds three other works to this painter's list. A Madonna in the Figdor collection at Vienna makes certain, says Snida, the differentiation of its author, the "Playing-card Master," from Konrad Witz. Other works are noted by him as hitherto unrecognized productions of the "Master of the Pernigsdörffer Altar," of the "Master of the Thalheimer Altar" (the glass-windows in S. Nazaro at Milan), of Leonhard Schäuuffelein, and of Rubens.

ITALY

Notes on the Painting of the Trecento. — In *Monatshefte f. Kunstwiss.* I, 1908, pp. 1118-1123, O. SIRÉN publishes a number of notes upon various painters treated in his work on Giotto, and adds materially to his catalogues of works.

Attributions to Giotto. — In *Rass. d' Arte* VIII, 1908, p. 45, B. BERENSON discusses briefly the attributions to Giotto and assigns to him only scenes II-XIX of the Life of St. Francis in S. Francisco at Assisi and one fresco in the Magdalen Chapel, the Resurrection of Lazarus. The Stefaneschi altar-piece and the allegories in the lower church at Assisi are not his.

Early Architectural Drawings by Michelangelo. — *Rep. f. K.* XXXI, 1908, pp. 101-107, contains a discussion by F. BURGER of two sketches by Michelangelo preserved in Casa Buonarroti at Florence. The first he considers an early design for the tomb of Julius II, which must have been done in April, 1505. The other is a fragmentary design for the choir of St. Peter's.

Michelangelo and the Tomb of Cecchino Bracci. — In *Monatshefte f. Kunstwiss.* I, 1908, pp. 963-974, E. STEINMANN shows by the correspondence of Michelangelo that, while the execution of the tomb of Cecchino Bracci was confided to Urbino, the great master personally interested himself in the work and made the designs for it, two of which the writer has discovered in Casa Buonarroti at Florence. We thus recover an important

example of Michelangelo's later sculpture, although the bust of the youth Bracci is far below Michelangelo's own work.

Michelangelo's Method. — A. GOTTSCHESKI follows up his discovery of Michelangelo's torso model in the Academy at Florence with an article in *Monatshefte f. Kunstwiss.* I, 1908, pp. 853-867, in which he endeavors to prove that the master's scorn of models and cartoons is a romantic invention. He brings evidence to show that Michelangelo prepared large models for the figures of the Medici tombs with his own hand, to guide his assistants in the preliminary blocking-out of the groups.

The Block for Michelangelo's David. — The block for Michelangelo's David was a rejected quarry-block designed for the cathedral on which the preparatory cutting had been carried too far. Sansovino had the intention of adding pieces to the block and making out of it a colossal statue, but it was reserved for Michelangelo to carry out his idea and, without any additional pieces, to carve the great David. A. GOTTSCHESKI suggests that the shape of the half-worked block is the reason for the remarkable swing of the body of the David to the right. (*Monatshefte f. Kunstwiss.* I, 1908, pp. 302-303.)

Chronology of the Sistine Frescoes. — The opinion of Spahn, expressed in his *Michelangelo und die Sixtinische Kapelle* (Berlin, 1907), that the *Stichkappen* and lunettes of the Sistine ceiling do not all belong to the final decoration of the chapel, as was hitherto supposed, but belong in part to the earlier portions, is borne out by a critical examination of the style of these frescoes by A. WURM in *Rep. f. K.* XXXI, 1908, pp. 305-313. Wurm finds that Michelangelo prepared five cartoons for the lunettes of the first third of the ceiling (counting from the entrance), but painted them in only after the completion of the ceiling-panels and of the Sibyls and Prophets.

The "Broad Technique" of Perugino. — E. A. DURAND-GRÉVILLE, in *B. Soc. Ant. Fr.* 1908, pp. 89-90, discusses the two methods of treating outlines attributed to Perugino, the one of hatching, the other a much broader, cinquecento technique. He does not believe that two so different processes could be used interchangeably by the same artist, and proposes to attribute the pictures done in the broader "Raphaelesque" style to the early period of Raphael himself. He thus assigns the Vision of St. Bernard at Munich to the younger painter.

Two Predelle by Raphael. — In *Monatshefte f. Kunstwiss.* I, 1908, pp. 1071-1079, G. GRONAU discusses two early predelle by Raphael, one in the gallery at Lisbon, the other in the collection of Sir Frederick Cook at Richmond. He identifies the former as the "Raising of Three Dead Persons by Eusebius, through the power of St. Jerome," an incident recounted in the *Hieronymianum* of Giovanni d'Andrea (*A.J.A.* XII, p. 490); and the latter as the punishment of the heretic Sabinianus. He assigns the predelle to the altar-piece of S. Domenico in Citta di Castello, of which the Crucifixion (which contains a St. Jerome) in the Mond collection in London formed the principal panel.

A Painting wrongly attributed to Raphael. — The Madonna and St. Anne, with the Christ Child and Infant St. John, in the possession of Sig. Bertoldi at Asolo-Veneto, was originally attributed to Raphael, and this opinion has persisted, in spite of the fact that Morelli assigned the picture to Bachiacca. G. POGGI, in *Monatshefte f. Kunstwiss.* I, 1908, pp. 275-280,

shows that the identical group occurs in three other pictures of the lesser painter, and can therefore be by his hand only.

New Lists of Authentic Giorgiones.—W. SCHMIDT, in *Rep. f. K.* XXXI, 1908, pp. 115–119, repeats a previously published catalogue of the “authentic” and “false” works of Giorgione. He regards the following as authentic: The twin pictures in the Uffizi (Judgment of Solomon and The Proving of Moses), the Castelfranco Madonna, the Dresden Venus, the so-called Magi at Vienna, finished by Sebastiano del Piombo, the “Venetian Subject” in the Vienna Academy, the Storm in the Palazzo Giovanelli at Venice, and the Boy with the Arrow in the Imperial Gallery in Vienna. In his list of falsely attributed works, the most noteworthy rejections are the St. Petersburg Judith, the Louvre Concert, which he gives to Titian, together with the Christ bearing the Cross, in the church of S. Rocco at Venice, and the so-called portrait of Caterina Cornaro in the Crespi collection at Milan. Another list is proposed by G. GRONAU, in an unfinished article (*ibid.* pp. 403–436), in which he discusses the biographies of Vasari, Ridolfi, and Marcantonio Michiel, concluding that the last-named only is of use in identifying Giorgione's works. A new criterion for identification is the low-cut neck in his women's tunics (Castelfranco Madonna, St. Petersburg Judith). The Judith of St. Petersburg is deemed a copy after Giorgione's original as well as the Vienna Boy with the Arrow, for which he suggests Varotari. Gronau accepts the Louvre Concert, the S. Rocco Christ bearing the Cross, and the Hampton Court Shepherd Boy.

A Miniature of Attavanti and Verrocchio's Baptism.—A miniature in a missal, painted in 1483 by Attavanti for Thomas Jaime, bishop of Dol, and now in the Havre museum, reproduces fairly faithfully the Baptism of Verrocchio. This dates the latter picture probably within the period when Leonardo was still working with Verrocchio and removes the chronological objection to the tradition repeated by Vasari, that Leonardo painted one of the angels in the picture. (S. REINACH, *C. R. Acad. Insc.* 1908, pp. 543–546.)

New Attributions to Giovanni Francesco da Rimini.—MARY L. BERENSON, in *Rass. d'Arte*, VIII, 1908, p. 163, discusses three pictures which she assigns to Giovanni Francesco da Rimini. They are: a Miracle of S. Niccolò da Bari in the Louvre (no. 1659); a Virgin adoring the Child in the museum at Le Mans (no. 11); and a Miracle of S. Niccolò in the Museo Cristiano of the Vatican (Scaffale O. IV). Another Madonna by the same painter is reported by G. CAGNOLA, *ibid.* p. 179.

The Putti of Desiderio da Settignano.—In *Rass. d'Arte*, VIII, 1908, pp. 150–151, P. GIORDANI endeavors to isolate the type of putto used by Desiderio, and therewith revise the list of works attributed to him. He concludes that both Desiderio and Donatello had a hand in the cherubim frieze of the Pazzi chapel, and that Desiderio was the author of the Putti sustaining Garlands in the New Sacristy of the Duomo at Florence, a work ascribed by Burckhardt and Bode to Giuliano and Benedetto da Maiano.

Alessandro Vittoria.—L. SERRA, in *Rass. d'Arte*, VIII, 1908, pp. 95–99 and 108–114, reconstructs the life and *oeuvre* of Alessandro Vittoria. He finds that his “artistic education” was self-given for the most part, for while his early works show the influence of the years spent in Sansovino's workshop at Venice, the breadth and power of Vittoria's technique contrast with Sansovino's Florentine grace.

Botticelli's "Spring." — W. UHDE (*Monatshefte f. Kunstwiss.* I, 1908, pp. 913-914), shows that the so-called Flora in Botticelli's Spring is a maiden fleeing from passion, denoted by the so-called West Wind. The "Spring-maiden" beside her indicates the spring-time of her life. To the left of the picture we see her again dancing with her companions (the Graces), but already transfixed by the shaft that the Eros at the top of the picture has launched at her, and gazing tenderly at the youth who plucks fruit from the tree to the left (Mercury). The Venus in the centre of the picture represents the mature woman brooding over her approaching maternity. The writer would christen the painting, "The Mystery of Woman." The same subject is treated by W. WEISBACH in *Jb. Preuss. Kunsst.* 1908, pp. 1-20, who includes a discussion of Pesellino's Crucifixion in the Kaiser Friedrich Museum at Berlin.

Two Statues in Florence by Veit Stoss. — H. VOSS sees in two wooden statues of Florence, a S. Rocco of the church of S. Maria Annunziata and a Crucifix in the Ognissanti, works by Veit Stoss. (*Jb. Preuss. Kunsst.* 1908, pp. 20-29.)

The Lovers of Casa Buonarroti. — The curious group in the Casa Buonarroti of a man holding in his arms a fainting woman with a third personage in the background has been variously assigned to Sebastiano del Piombo, Giorgione, and Titian, and variously explained as "Raphael and his Mistress." (E. A. BENKARD, in *Monatshefte f. Kunstwiss.* I, 1908, pp. 654-656.) It was suggested by a certain Venetian story among the novels of Bandello. K. BOVINSKI (*ibid.* I, 1908, pp. 906-909) relates the picture to another novel of Bandello's, concerning the tragic love affair of the niece of a Duke of Burgundy and Carlo Vaudrai to whom she was secretly married.

Fifteenth-century Portals in Genoa. — Ten lintels with figured scenes or conventional decorations, ornamenting doors of houses in Genoa, are reproduced by C. CESARI in *Russ. d'Arte*, VIII, 1908, pp. 71-74.

Girolamo Mazzola. — Apropos of a Madonna by Girolamo Mazzola recently acquired by the Pinacoteca at Parma, L. TESTI publishes, in *Boll. Arte*, II, 1908, pp. 369-395, a description of his *oeuvre*, a chronological table of the documented incidents in his career, and a genealogical chart of his family.

The Massacre of Otranto. — In *Monatshefte f. Kunstwiss.* I, 1908, pp. 593-601, P. SCHUBRING argues that scenes representing the Massacre of the Innocents in a colonnaded hall in which Herod presides as an Oriental monarch were suggested by the massacre of the inhabitants of Otranto by Turks in 1480.

Hispano-Moresque Ware and Florentine Majolica. — W. BODE contributes to *Jb. Preuss. Kunsst.* 1908, pp. 276-298, a paper on the influence of Hispano-Moresque ware on Florentine Majolica. He treats a series of fifteenth-century imitations found only in excavations at Florence, and shown by the arms which decorate them to be of local origin.

The Medallist à l'Amour Captif. — The authorship of a beautiful medal, having a bust of Lucrezia Borgia on the obverse, and a putto bound to a tree as the reverse type, has never been settled. Pomedello, and even Filippino Lippi have been suggested, and Bode and Fabriczy have identified the medallist with Gian Cristoforo Romano. By a process of exclusion, and the resemblance to medals of Melioli of Mantua, J. DE FOUILLE, in

Gaz. B.-A. XXXIX, 1908, pp. 385-393, arrives at the conclusion that the latter artist is responsible for the Lucrezia medal and those related to it.

The Medallist Lysippus.—G. F. HILL, in *Burl. Mag.* XIII, 1908, pp. 274-286, discusses the medals attributed to Lysippus, and reduces the number to some twenty. He believes him rated higher than he deserves, having facility in portraiture, but small grasp of character and poor in his designs for reverses.

FRANCE

The Tomb of Cardinal François de la Rochefoucauld.—In *R. Arch.* XII, 1908, pp. 96-106 (2 pls.), A. BOINET quotes documents relating to the tomb of Cardinal François de la Rochefoucauld, which was originally in the church of St. Genevieve and is now in the hospice d'Ivry, in Paris. It is the work of Philippe Buyster, who was made sculptor in ordinary to the King in 1632. The tomb was made 1656-1660. The kneeling figure of the cardinal is excellent, the figure of the child holding his robe is less attractive. A drawing in the Cabinet des Estampes shows that the monument was not made exactly as originally designed. A cast in the library of St. Genevieve may have been taken from a bust of the cardinal by Buyster. The original has disappeared, as has also a bust by Didier Humbelot.

An Ivory Statuette in the Museum at Cluny.—In *M. Soc. Ant. Fr.* LXVII, 1907, pp. 115-136 (2 pls.; 2 figs.), C. ENLART discusses an ivory statuette 7 cm. high in the museum at Cluny. It represents a nude woman standing and dates from the fifteenth century. The writer shows that it is to be connected with the rather large class of statuettes representing Vice as a nude woman accompanied by Death. Most of them date from the end of the fifteenth and the beginning of the sixteenth centuries.

GERMANY

A Chronological List of Dürer's Works.—A very useful list of Dürer's works, in chronological order, is published by SIR W. M. CONWAY in *Burl. Mag.* XIII, 1908, pp. 214-216.

The Missing St. Joseph in Dürer's Adoration.—It was customary from the middle of the fifteenth century on to include St. Joseph in the group of the Adoration of the Magi and the omission of his figure in Dürer's rendition of the subject in the Uffizi has often excited comment. But an inventory of the picture in 1619 mentions Joseph, as does Matthäus Faber in 1717. The picture, too, shows traces of a figure behind Mary, and the St. Joseph must, therefore, have been obliterated by some restoration of the eighteenth or nineteenth century (G. GLÜCK in *Jb. Preuss. Kunsts.* 1908, pp. 119-122). H. KEHRER, in *Z. bild. K. N.F.* XX, 1908, pp. 61-66, compiled a list of contemporary pictures inspired by the Uffizi painting or others of Dürer's Adorations.

Martin Hess.—In a study of Martin Hess, mentioned by Dürer in a letter of 1509, in *Rep. f. K.* XXXI, 1908, pp. 437-445, C. GEBHARDT arrives at the conclusion that he is not, as Thode suggested, identical with the "Hausbuch-Meister," but that he was a native of Frankfurt, a painter and engraver who established himself as a citizen of Frankfurt in 1508, and probably became a pupil of Dürer's at the beginning of the century. He finds that he is the author of the works which Weizsäcker grouped around

the portrait in the possession of Freiherr von Holzhausen, and adds to the list another picture, the Invention of the Cross in the Germanic Museum.

Hans Wechtlin.—H. RÖTTER, in *Jb. Kunst. Samm.* XXVII, 1907, H. 1, attempts a reconstruction of the life and *oeuvre* of the Strassburg painter, Hans Wechtlin. A Life of Christ in woodcuts and the cuts signed *Jo. F.* are the only works which can with certainty be ascribed to the master. Nevertheless, by attributions on stylistic grounds, the writer greatly increases the number of works which can be related to Wechtlin, and traces his artistic development. Born in Strassburg in 1460, he produced in the eighties the woodcuts for the *Seelenwurzgarten*, the Swabian Chronicle, and the Eunuchus of Terence published by Dinekmuth at Ulm, and came to Nürnberg in 1487, where his chief work was the illustration of the *Koberger Passionale* of 1488. About 1490 he migrated to Basel, probably with Dürer; and Röttinger identifies him with the artist called by Weisbach the "Master of the Bergmann *bottega*." In 1498 he is found again at Nürnberg, working in close touch with Dürer. During Dürer's second visit to Venice, Wechtlin lived in Strassburg, but returned, with Dürer to Nürnberg in 1506. Son of a priest, he was debarred from citizenship until 1514, which accounts for the late appearance of his monogram.

The Dresden Magdalen a Copy?—The attribution of the Dresden Magdalen to Correggio is now generally accepted, but the authenticity of the picture was questioned by Morelli, and J. von SCHMIDT, in *Rep. f. K.* XXXI, 1908, pp. 241-243, points out that it is called a copy by "Albani, after Correggio" in a catalogue of 1783, which shows that a tradition to that effect existed in the eighteenth century. The picture itself is not at all inconsistent with Albani's art.

Konrad Meit and the Tombs at Brou.—In *Jb. Preuss. Kunsts.* 1908, pp. 77-118, W. VÖGE shows that the statues on the tombs of Philibert of Savoy and Margaret of Austria at Brou are practically all the work of Konrad Meit. Three of the four putti on the tomb of Margaret and one of those on the tomb of Philibert are also his. An assistant, Benoit de Serins, probably carved the putti holding the arms of Savoy; while Meit's brother Thomas was doubtless the author of the two putti holding the arms of Margaret and of one of those on her husband's tomb. V. NODET, in *Chron. Arts*, 1908, pp. 77-118, assigns the putti to the assistants of whom one was a Florentine. This would explain their Italian character.

Woodcuts of Matthias Gerung.—C. DODGSON, in *Jb. Preuss. Kunsts.* XXIX, 1908, pp. 195-216, catalogues a series of sixty woodcuts of Matthias Gerung, part of them conceived as illustrations of the Apocalypse, a few containing biblical subjects with allusions to contemporary religious controversies, and a large number representing satirical and allegorical subjects.

GREAT BRITAIN

A Portrait of Robert the Devil.—In *Rep. f. K.* XXXI, 1908, pp. 132-137, H. JANTZEN discusses a Madonna, St. Margaret and Donor, belonging to Mr. Weld-Bundell, exhibited at the Guildhall, London, in 1906. It is a work of some follower of Jan Van Eyck, showing both Flemish and French characteristics. The resemblance of the kneeling donor to Everard de la Marek, prince-bishop of Lüttich, and an old description of the picture

which mentions the donor and the St. Margaret as portraits of a Count de la Marck and his wife, together with the fact that St. Margaret is represented kneeling on a dragon, which was, according to Brantôme, the device of Robert II de la Marck, make it very likely that the donor is the last-named nobleman, better known as Robert the Devil. The epithet is alluded to by the gesture which he makes with his right hand toward the dragon.

AMERICAN ARCHAEOLOGY

Dighton Rock.—In *Am. Anth.* N.S. X, 1908, pp. 251-254 (pl.), D. I. BUSHNELL, Jr., publishes a letter from Isaac Greenwood to John Evanses (*sic*) dated "N. E. Cambs." Dec. 8, 1730, and addressed to London. It gives a description of the rock in accordance with a desire expressed by members of the Royal Society, and also a résumé of contemporary New England opinion about it. The letter is in the British Museum, and is numbered Add. Ms. 6402, fol. 106 et seq.

Wooden Bowls of the Algonquin Indians.—In *Am. Anth.* N.S. X, 1908, pp. 423-434 (3 pls.; 4 figs.), C. C. WILLOUGHBY describes the ladles, platters, and bowls of the Algonquin tribes. The handles of the first are sometimes recurved, or may be decorated with animal or human forms. A few plates or platters have been preserved, often through their secondary later use in games (dice-games). The bowls vary from simple forms to cradle-shapes and animal forms. These may, as in pottery, form the handles, or the bowl may be carved in the back of the animal itself. An interesting bowl (pl. XXIX) in the Peabody Museum of Harvard University shows markings that may have been made by an iron tomahawk and a steel knife as well as stone scrapers. As to date, "It does not seem probable that in the eastern section of the Algonquin area many wooden vessels were made with stone tools after the first third of the seventeenth century."

Fort Ancient.—In *Rec. Past*, VII, 1908, pp. 191-198 (2 maps; 4 figs.), G. F. WRIGHT gives an account of Fort Ancient in Warren County, Ohio, the largest of the prehistoric earthworks in North America. It has a total length of about three and one-half miles and its earth walls vary in thickness from twenty to seventy-five feet at the base and have a height varying from five to twenty-four feet. It is 260 feet above the neighboring river. The fortification consists of a north and a south fort. In the latter was a cemetery in which three hundred graves have been opened. The interments were made in coffin-shaped stone graves formed by placing stones beside and over the bodies. Few implements were found with the skeletons. In *Bulletin of the Department of Archaeology, Phillips Academy, Andover*, IV, 1908, pp. 27-166 (41 pls.; map), W. K. MOOREHEAD discusses this earthwork at length and concludes that it is eight or nine hundred years old; that its culture is different from that found in the Hopewell-Cumberland-Tennessee group of mounds and is allied to that at Madisonville. He believes that the builders occupied a territory seventy by eighty miles in extent.

Northwestern Illinois.—In *Rec. Past*, VII, 1908, pp. 52-58 (2 figs.), pp. 85-95 (3 figs.), W. B. NICKERSON discusses the stone graves and the mounds of northwestern Illinois. The former are rough without cists;

the skeletons lie irregularly interred. Some accompanying pottery and stone specimens were found. The mounds are both conical and elongated. In mound 16 (conical) a vault was found originally roofed over. Many human bones decayed or calcined occurred in this. In one of the elongated mounds a burial was also discovered; the skull lay 1 foot 9 inches deep. As to antiquity the author says: "The relative age of the stone-covered graves is perhaps not much less than that of the long mounds. The mode of burial is similar, and the absence of anything denoting white contact places them, so far as examined, well back in time."

The Nez Percé Indians.—In *Mems. Am. Anth. Ass.* II, 1908, pp. 165-274 (5 pls.; 6 figs.), H. J. SPINDEN discusses the archaeology and ethnology of the Nez Percés of northwestern Idaho. There are a few shell heaps, village sites, and cemeteries. The burials are capped by boulders and have cedar stakes around or over the body. Ornaments, etc., are found, but no remains of food. The stone implements described include chipped knives, projectile points, scrapers and perforators, ground pestles, mortars, and mauls. Arrowheads are characterized by a variety of bases, and the occurrence of serrated edges and double barbing is noted. Pipes more or less decorated are found; the earlier form is probably the straight tubular pipe. Wedges and bows are made of horn; and bone awls, flakers, whistles, and beads, as well as dice and gaming pieces are described. Copper was probably not known before white contact; weaving was rather extensively practised. A variety of baskets, wallets, hats, etc., occur. In general the author concludes that the culture drew its elements from both the plains and the Pacific Coast and that the early state was more in accord with the culture of northern California and southern Oregon than with the east. There is an entire absence of migration myths.

Petroglyphs in Southeastern Alaska.—In *Am. Anth. N. S. X*, 1908, pp. 221-230 (2 pls.; 23 figs.), G. T. EMMONS discusses the stone and rock carvings of the Tlingit. They are old, as the present natives know nothing of their origin. They represent human and animal heads and forms, cosmic symbols, and even myths. The animal forms are largely totemic. They show some variation in design,—the older forms displaying less realism and more consecutive composition than the newer which contain figures true to nature, ornate and independent.

Explorations in Mexico and Guatemala.—In *Mem. Peabody Museum*, IV, 1908, No. 1, pp. 1-52 (13 pls.; 8 figs.; map), and No. 2, pp. 53-127 (31 pls.; 14 figs.), T. MALER describes his explorations on the Upper Usumacinta River and in the Department of Peten, Guatemala, and adjacent regions. The monuments are described in order from the following sites: **Altar de Sacrificios** (named from the round, carved, sacrificial stone): altars and stelae. **Seibal**: stelae, sacrificial stones. **Itsimté-Sacluk**: stelae, temple-palace ruins and mounds and chultuns (rain-wells). **Cankuen**: terrace with stelae and structure-ruins. **Topoxté** ("island of ancient monuments"): five principal buildings, six small stelae, altars. **Yáxhá** (a ruined city three km. long): main temple with traces of vaulting and color, smaller buildings, stelae. **Benque Viejo** (British Honduras): temple and stelae, with altar carved with skeleton in a mournful attitude. **Naranjo**: a large group of ruins with buildings and stelae; stairway called "Tiger-head," with glyphs, an *aguada*, or water-pool, striking objects in chipped

flint. The stelae at the various sites are described and photographed in detail.

The Dog in Ancient Mexico. — In *Am. Anth.* N. S. X, 1908, pp. 419-422 (9 figs.), H. BEYER explains the rôle of the dog in ancient Mexican mythology, by suggesting that he primarily represented a constellation. The dog was the carrier of the human soul after death and a parallelism is worked out between him in this capacity and Xolotl who carries the sun through the underworld. A symbolic ornament of Xolotl, the author thinks, was the "tail of the year," or in a conventionalized form the constellation "dog." Of this same constellation the Pleiades are the most conspicuous cluster. At the end of a cycle the Mexicans watched these stars and celebrated a new cycle when they passed the zenith. In this way a parallel function of connecting the old and the new is established for the constellation and its eponymous animal.

Zoölogy of the Maya Manuscripts. — In *Z. Ethn.* XI, 1908, pp. 704-743 (30 figs.), W. STEMPPEL gives an account of the animals represented in the Dresden Ms. and the Codices Troano, Cortesianus, and Peresianus. They are generally those of Yucatan and Guatemala; especially those which are conspicuous by their number, advantage or disadvantage to humanity, or by their physical beauty. The following are mentioned: monkey (?), jaguar, puma, dogs, bear, hare, agouti, peccary, an extinct (?) species of deer, elephant (?), armadillo, opossum, yapok (water opossum), parrot, harpy-eagle, owl, vulture, raven (?), trogon, turkey, tern (?), pelican, crocodile, turtle, iguana, rattlesnake, boa imperator, frog, fishes, bees, scorpion, snails. On the elephant the author states that just as the pictorial representation of the mammoth proves his contemporaneity with man, so do the elephant gods' heads make a similar condition probable for Central America.

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1908

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NOTES

At open meetings of the American School at Athens the following papers have been presented:

- February 5. B. H. Hill: Summary of the Work of the School in 1908.
 G. W. Elderkin: The Fountain of Glauke at Corinth.
 W. K. Prentice: A Town and a Royal Villa of Early Christian Syria.
- March 5. W. K. Prentice: The Magic of Names.
 B. H. Hill: Excavations at Corinth in 1908.
- April 2. B. H. Hill: The Western Part of the Erechtheion.
 W. B. Dinsmore: The Gables of the Propylaia.

The American School in Palestine has purchased a convenient and attractive site for a building, the plans for which are now being drawn.

The Legislative Assembly of New Mexico has ratified the agreement with the Archaeological Institute by which the Old Governor's Palace at Santa Fe is to be used for a School of American Archaeology. The Board of Regents has organized with Justice John R. McFie as President and Hon. Nathan Jaffa as Secretary. Field work will be undertaken by the School in 1909 as follows:

In Utah excavations will be carried on in the pueblo and cliff-house ruins in the vicinity of Navajo mountain. In Colorado special excursions to the cliff-dwellings in the Mesa Verde National Park will be arranged for the teachers attending the meeting of the National Education Association in Denver. Lectures will be given by Dr. J. Walter Fewkes beginning July 12. In New Mexico the excavations begun at Rito de los Frijoles, thirty miles northwest of Santa Fe, will be continued. An expedition to Central America will start about September 15.

The Fellows and Associates are engaged in the following work: S. G. Morley is studying the orientation of Maya temples and has already examined forty buildings in Yucatan. A. F. Bandelier is preparing historical and archaeological notes on the Southwest, especially the Rio Grande Valley. J. P. Harrington is studying the myths and language of the Tewa of the Rio Grande.

ON *A.J.A.* XIII, pp. 39-44

Professor Paul Herrmann, of Dresden, calls attention to the fact that in 1895 he recognized as a work of the Renaissance the relief published on p. 40 of this *JOURNAL* and that his reasons for doubting its antiquity are published in *Arndt-Amelung, Einzelverkauf*, Series II, p. 55.



JAR FROM MOCHLOS: L. M. I.



STRAINER FROM MOCHLOS: L. M. I.



CUP (M. M. III.) AND STONE VASE (E. M. II.) FROM MOCHLOS.

American School
of Classical Studies
at Athens

EXCAVATIONS ON THE ISLAND OF MOCHLOS,
CRETE, IN 1908

[PLATES VI-VIII]

THE DISCOVERY OF THE SITE

WHEN excavations were in progress on the island of Pseira in 1907, the Turkish boatman who had first called our attention to that site told me of other old walls on the neighboring island of Mochlos, three miles farther east. At the end of the season I crossed from Pseira with about twenty men, intending to make a three-days trial of the site. The ancient town has a southern exposure entirely shut off from the prevailing north wind, and the July sun was found to make work almost impossible. After two days we left the site, feeling that it would be worth excavations on a larger scale; for, although the finds were few in number, their quality left nothing to be desired.

Accordingly, on April 13, 1908, I began work with about eighty men, whose number was later increased to one hundred and twenty. The work continued until June 20, and, although many houses are still untouched, it is doubtful if the site would repay the expense of a second season. The excavations, which proved to be of exceptional interest, were carried on under a concession granted to the American School at Athens, to which institution I am also indebted for a contribution towards expenses of the work.

The discovery of the cemetery, which was unusually productive, has proved the value of excavations on these small sites in eastern Crete. The Early Minoan periods in this part of the island seem to have been of unusual prosperity, and are of the greatest importance in filling the gaps so noticeable in the great palace sites, where the deposits of this date are relatively scanty.

THE ISLAND

The island of Mochlos is a small circular mass of limestone lying a couple of hundred yards from the shore of Crete, opposite the modern port of the villages of Tourloti, Sfaka, and Lastro. On the north side the island rises from the sea in abrupt cliffs to a height of about 200 feet, while to the south it slopes sharply down to the sea level. The ancient town lay on this south face of the island, and appeared to cover almost its entire area (Fig. 1). The water between the island and the



FIGURE 1. — MOCHLOS: THE ISLAND FROM THE SOUTH.

mainland is very shallow at one point, and, if the same subsidence noticeable elsewhere in Crete took place here, in ancient times the island was doubtless part of the mainland of Crete. On the opposite shore, where lie the warehouses of the modern port, are the remains of many Minoan house walls, which would show that, whether connected or not, the town lay on both the island and the opposite shore.

If in Minoan times the neck of land which is now barely submerged was above sea level, Mochlos must have possessed the best harbor on the coast. To-day the shelter is excellent in all but a northwest gale, but then the waves break over the submerged tongue of land with such violence that, short as the

distance is, it is almost impossible to land from a small boat on either shore.

The island was inhabited continuously from the very earliest of Cretan periods, Early Minoan I, until M. M. I,¹ when all these sites in eastern Crete appear to have suffered a complete destruction. In M. M. III, however, we find it once more inhabited for a short time, until it is again destroyed in L. M. I. In L. M. III there was no resettlement of the town, although at one point, judging from the parts of several vases found, there may have been an isolated house of that period. On the rest of the site there are no traces of L. M. III, and the island remained uninhabited until late Greek and Roman times. In the Greek and Roman periods a town had sprung up on the mainland about half a mile to the east, near where stands to-day the small church of Hagios Andreas. Numbers of Greek and Roman coins are constantly turned up there, although it is not possible as yet to give a name to the town. At this time Mochlos was once more used as a port, and the houses of this period covered almost the entire space which had been previously occupied by the Minoan town.

On the shore near the warehouses are traces of a number of rock-cut tombs which belonged to this later settlement. In a river bed close by, a small quarry shows that a good deal of ashlar masonry must have been used in this period, although at first I had hoped that it might date from Minoan times and indicate a building similar to the small palace at Gourniá; but as no remains of this kind came to light in the Minoan stratum, and the only existing ashlar walls belonged to the late houses, it appears that the quarry must date from the same late period as the tombs just mentioned.

On the topmost ridge of the island lay a large fortress, also of a late period. A long wall follows the northern edge of the hilltop along the cliffs, with towers at the east and west ends and a larger one in the centre. A curtain wall descends from the western tower to the water's edge on the south, and a simi-

¹The divisions of Cretan chronology established by Dr. A. J. Evans are adopted in this article, and are designated by the customary abbreviations: E. M. = Early Minoan, M. M. = Middle Minoan, L. M. = Late Minoan, and in each of these divisions are three subdivisions, I, II, III.

lar one probably existed on the east, although no trace of it remains. These fortifications must date from the Byzantine period, when the Saracenic pirates first made their appearance in Cretan waters; for during the Roman occupation there was no danger of any foreign attack, and it is not likely that many fortresses were built at that time. The fort on the topmost ridge of Pseira, though smaller in size, must date from the same period, but was at most only a beacon station to warn the settlements on the isthmus of the approach of an enemy.

No digging was attempted except some trenches for tombs on the site of the fort, and the many Roman houses that were swept away in clearing the Minoan town site gave little or no clue as to date. A coin of Hadrian, one of Diocletian, and several of Constantine the Great were found, as well as many clay lamps and a curious rhyton, which may be late Greek, showing the bust of a satyr holding both hands to his head.

This Roman reoccupation of the site played sad havoc with the earlier remains, and we found Roman walls sunk deep into the Minoan houses, in places completely destroying them. Luckily the constant occupation of the site in early times and the steep slope of the hill above the houses caused a great accumulation of soil, in many cases four metres deep. This, of course, rendered the work of excavation a tedious one, and at Pseira last year twice the area was uncovered in the same time with half the number of men. Nevertheless it is to this depth of soil that we owe the few houses which remained intact, as it prevented the Romans from cutting away more than the upper courses of the underlying walls.

The only existing building on the island at present is the little church of Hagios Nikolaos, a conspicuous object in the photograph (Fig. 1), which was taken from the mainland looking north. As this little church occupies the central point of the ancient town site, I have used it as a base in describing the various house blocks, taking first those to the west of the church, shown on the left in the photograph.

The excavation at present consists of four cuttings, which can be distinguished in Figure 1. One lies to the east, a second to the west of the church, and these two have uncovered the line of houses along the water's edge. Later in the

season two corresponding lines of rooms were opened higher up the slope in the vain endeavor to find the Minoan levels in an undisturbed state. Owing to this tapping of the site in four separate places, a connected plan of the houses was not possible, and only a plan of one large house on the southeastern slope is given. As this is the only one which presents any features of the slightest interest, it may be found sufficient.

It was always found that the L. M. I houses had perished in a violent conflagration. This has had a very serious effect on the pottery, some of the best vases being so burnt and charred as to be almost valueless, while the surface of the smaller vases was, as a rule, in very bad condition. This fact and the great destruction caused in Roman times are the chief reasons for leaving the site in its present unfinished state.

Work was begun on the west end of the south slope, and here the Roman walls had swept away almost the entire L. M. I stratum. At this point the soil was very deep, and below the few remains of M. M. I a deposit of E. M. I, II, and III, associated with early house walls, came to light. Between this point and the church there were some L. M. I houses where the Roman walls did not cut so deeply, but near the church everything was destroyed down to the M. M. I and E. M. III deposits. East of the church the L. M. I houses were much better preserved, owing to the great depth, and only the upper parts of the house walls had been torn away in laying the Roman foundations. This seems to have been the best quarter of the L. M. I town, with large, heavily built houses, but for that very reason it seems to have been more thoroughly plundered, so that the finds were but few. The best house was built very shortly before the destruction, as it cuts into some houses belonging to the earlier part of L. M. I. It lies still farther towards the eastern point of the island, and must have been a very grand mansion for so small a town, although in reality it is only a flimsy copy on a small scale of some of the features of Minoan palace architecture.

Toward the end of the season two lines of rooms were opened farther up the hill, but here the Roman level was again lying directly above the M. M. I remains, and even this earlier stratum was very much disturbed.

Everywhere on the site were found, in the lowest levels, masses of pottery of the E. M. III period, which seems to have been the most prosperous time in the history of the town. Some of this ware is of a very fine class, better than that found either at Pseira or Vasiliki; and in clay and quality of paint it leaves nothing to be desired.

The early cemetery which was discovered and cleared on the west side of the island has quite revolutionized many of our former ideas as to the culture of E. M. II and III. It produced an enormous mass of clay vases, weapons, vases of marbles, breccia, alabaster, and other bright-colored stones of beautiful workmanship; also a considerable treasure of gold ornaments of various sorts.

It has been found impossible to combine a sufficiently detailed description of this cemetery with a short report on the town houses, and the results of the excavations in the cemetery will be published separately in the near future.

THE HOUSES

Parts of perhaps twelve L. M. I houses have been cleared. Three of these, which, for convenience, I have called *A*, *B*, and *C*, occupy the three blocks to the west of the church.

In Block *A*, the westernmost of the three, almost no walls remain of the L. M. I period, except the massive east wall, which faces on a narrow street running up the hill north and south. This wall is built of very large, roughly hewn stones and appears to have belonged to a house of some importance. The entire core of the building had been swept away in Roman times, and on the removal of the Roman walls a number of small rooms of E. M. II and III were brought to light. A few M. M. I potsherds were found among them, but evidently that level as well had been destroyed by the Roman walls. These rooms of E. M. II and III are all very small, with poorly built walls; in no case have we an outer house wall, which was doubtless of heavier materials.

From these rooms come a good many fragments of the mottled and the black burnished wares of E. M. II, while at a slightly higher level lay vases of the light on dark geometric style of the succeeding period. There seems to have been no

rebuilding between E. M. II and III, the same houses serving for both periods, and consequently there are few whole vases of E. M. II, the remains being merely those of house breakage. A few sherds of the gray incised subneolithic ware, which immediately precedes the typical mottled ware of E. M. II, were found. Some fragments of clay ladles and crude pots of very gritty red or black clay indicate that the site was inhabited in E. M. I. This supposition is confirmed by the evidence of the cemetery, where a large deposit of this sort was found under the floor of one of the large tombs of E. M. II.

On the town site the only entire object of E. M. I came from this Block A. It is a goblet on a slender foot in black burnished ware of a type that continues in use during the first part of E. M. II (Fig. 2, No. 1). With it were found parts



FIGURE 2.—VASES FROM MOCHLOS: E. M. I. (Scale 1:3.)

of several clay ladles and large, shallow plates, both of which are peculiar to E. M. I deposits. Figure 2, No. 3, shows another black burnished vessel from this block, which was found in E. M. II context and is evidently the prototype of the E. M. III type of pot which was so common at Vasiliki.¹ The very fragmentary E. M. II remains in the block presented no characteristics that have not been noticed on other sites. The fine jug of Figure 6 comes from an E. M. III deposit and is an excellent example of the treatment of the spiral in this period.

Two small ivory seals, one of which is shown in Figure 3, came from the same deposit. The shape, from the evidence furnished by the cemeteries, seems to be characteristic of E. M. II

¹ *Transactions, Department of Archaeology, University of Pennsylvania*, Vol. II, Part 2, p. 123, Fig. 6.

and III, although stone seals of a somewhat similar type are met with in M. M. III. A good many typical E. M. III cups with the barred triangles (*Transactions*, Vol. II, Part 2, p. 120, Fig. 3 *a* and *c*), were found; also some of the round-bodied type so common at Vasiliki (*ibid.* p. 121, Fig. 4).



FIGURE 3.—IVORY
SEAL: E. M. III.
(Actual size.)

The best find in this block was made in the trial dig of 1907. It is the splendid jar shown in PLATE VI,¹ which is perhaps the best example of this class of L. M. I ware that has come to light. It lay in a room, part of which has been swept away by the sea, apparently the only part of the block where an L. M. I deposit remained intact. This is probably due to the fact that the sea had so eaten away the shore by the time of the Roman settlement that the settlers were obliged to place their walls rather farther up the slope than the Minoan builders had done. This jar belongs to the most advanced stage of L. M. I decorative art, when added red and white paint is profusely used for details. The motive appears to be taken from the date palm, the irregularities of the trunk being clearly shown, although as a whole the treatment is very conventional. Around the base are three bands of dark glaze, on which is painted a ripple design in white; this shows that the influence of the M. M. III ripple ware is still very strong in the fully developed L. M. I period. Both the white and red paints are extraordinarily well preserved, and except about the base, where the action of the salt has caused the surface to flake away, the jar is in a marvellous state of preservation. Two stone vases from this same deposit are reproduced in Figure 4, Nos. 1 and 5 of the upper row. The first, a cup of brown steatite, is unfinished, showing that stone vases were made on the site and not necessarily imported. No. 5 is a pretty cup of brown slaty stone, encircled by two carved wreaths similar to the painted design so common on the clay vases of this period (Fig. 4, Nos. 2, 3, upper row).

The road mentioned as bounding this block on the east has a deep Roman wall built across it some twenty metres from the

¹ Scale 1 : 4.2.

water's edge, and, as the excavation was not carried any farther up the hill at this point, it is impossible to say whether it continues for any distance. The paving had been entirely removed, probably soon after the destruction in L. M. I, as the Romans hardly reached the actual road bed, which was filled with nearly two metres of earth before their houses were built.

The next block, *B*, seems also to be a single house, although its core was torn away by Roman buildings. This house occu-



FIGURE 4. — VASES FROM MOCHLOS: L. M. I. (Scale 1:9.)

pies the space between the roadway just mentioned and a similar one farther to the east. The western wall is built of large, roughly hewn stones, and appears to have presented a solid front to the street with no entrance on this side. The only existing doorway opens on the easternmost of the two roads, but this part of the house was very badly preserved. All the rooms in the western part of the house showed signs of a great conflagration, being choked with cinders and charred woodwork. As is always the case where Minoan houses have been destroyed by fire, the sun-baked bricks have been thoroughly fired in the process, and a number were found choking the basement rooms. One of these bricks bears a curious relic of Minoan herds, as

while it was still moist a goat left the impression of his hoofs in the soft surface.

There were a good many vases of the poorer sort of L. M. I ware in all parts of this house. Most of them have a poor



FIGURE 5.—VASE: L. M. I.
(Scale 1:3.)

plant wreath on the shoulder (Fig. 4, upper row, Nos. 2, 3; lower row, Nos. 1, 3), a design which is very common on these sites toward the end of L. M. I, when L. M. II was already flourishing at Cnossus. These vases were nearly all "waisted" strainers of the type shown in PLATE VII or else small ewers like Figure 4, No. 3, upper row. There were one or two exceptions, however, and the fine jar in Figure 5 came from this deposit. It belongs to the class of imported vases so noticeable

at Pseira and is quite unlike the local fabrics common to these sites. This vase, though badly burnt, is a good example of L. M. II and greatly resembles one found at Hagia Triada by the Italian excavators.

One of the "waisted" strainers (PLATE VII¹) is of quite another class and shows L. M. I at its best, though how it came to be in such poor company is not easy to explain. It presents a technique new in the pottery of L. M. I, a white design painted on a pinkish ground that shades in parts to a pale orange. The upper part is very incomplete, but enough remains to show the greater portion of one side from rim to base. The shoulder is covered with scattered blossoms and a band of feather-like



FIGURE 5 a.—BOTTOM OF VASE.

¹ Scale 2:3.

ornament runs around the middle. The base, which is pierced with small holes to form a sort of strainer, is painted with conventionalized lilies, a design not uncommon in L. M. I. The easternmost part of this block, which had been greatly destroyed in Roman times, yielded out of its many rooms only a tall pedestal of red ware intended to support a clay lamp.

Block C, lying between this house and the church, had been cleared of all L. M. I deposits by Roman walls. In the part of the block nearest the road only the M. M. I level remained, while nearer the church this, too, had disappeared, leaving E. M. III lying directly beneath the Roman foundations.

The M. M. I vases were, for the most part, unpainted, and the only two good ones are so rotted as to be nearly valueless. They are both large amphoras of buff clay, painted with broad bands and circular masses of dark paint. These circular figures are picked out with white paint rosettes, which are very badly preserved, as the greater part of the surface of both vessels has entirely disintegrated.

The E. M. III deposit, which was here very rich, yielded some twenty vases. The jug and the plate in Figures 7 and 8 are from this hoard, which belongs to exactly the same stage of the development of E. M. III as do the objects from the rock-cut well at Vasiliki (*Trans.* Vol. II, Part 2, p. 118). The best vases from this deposit are shown in Figure 13, the three to the right



FIGURE 6. — JUG: E. M. III.
(Scale 1 : 3.)



FIGURE 7. — JUG: E. M. III.
(Scale 1 : 4.)

in the middle row and the three jugs in the lower row. With these vases were parts of a very thin bowl of gray limestone which, with similar fragments found at Vasiliki, seems to

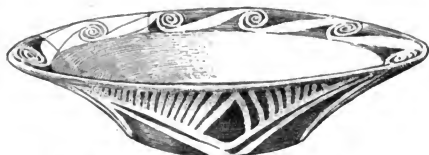


FIGURE 8.—PLATE: E. M. III. (Scale 1:3.)

indicate a branch of E. M. III development hitherto unsuspected, and one which attained to great excellence.

The easternmost rooms of this block were not destroyed but actually rebuilt by the Roman settlers, who took part of the old house and made a new façade of small ashlar blocks on the eastern side, which was the front of this later house.



FIGURE 9.—JUG: M. M. III. (Scale 1:2.)

Thrown out into a large rubbish heap near this building were masses of sherds of the sort so often noticed at Pseira, and which I then called M. M. III to distinguish them from the true L. M. I fabrics. Here, as at Pseira, the sherds almost all bear varieties of the ripple design and are made of the finest quality of buff clay covered with a lustrous polished buff slip. A good many sherds of this ware were found on all parts of the site. Whenever stratified it always lies directly beneath the L. M. I floors and above the M. M. I polychrome ware. From this it is clear that it is the first stage of the dark on light technique with the highly lustrous buff

slip, which becomes almost universal in L. M. I. One cup of this ware could be put together (PLATE VIII, No. 1), also the jug in Figure 9. Of the two, Figure 9 is the earlier, as the cup bears traces of added bands of white paint, which would tend to place it as actually belonging to L. M. I.

It is plain at Mochlos that when the final catastrophe took place L. M. I had passed its prime and a period of decadence had begun. The greater part of the fine L. M. I vases were represented only by fragments, while the vases which were actually in use at the time of the destruction show designs of a very stereotyped sort. Wreaths like those on the vases in Figure 4 are found on fully half of the vases found in the houses and poor spirals sometimes occur on squat amphora shapes, but the range of designs is almost exclusively limited to these two types. However, the vases, almost without exception, show traces of added white paint for details on the dark bands, which proves that they must still belong to L. M. I, although near its close.

At Pseira this paucity of styles in vase decoration was not so marked although a good deal of this poorer sort of ware was found. It would be only natural to suppose that the two sites, lying so near each other, should have perished at the same time. At Mochlos we have fewer deposits from which to judge of its condition at the time of the destruction, as the reoccupation of the entire site in Roman times has destroyed the greater part of the L. M. I remains. Certainly the two vases shown in PLATES VI and VII rival anything found at Pseira and show no signs of decadence, although the strainer was found with a large deposit of the poor ware just mentioned. As in the case of the fine vases from Pseira these were, doubtless, carefully treasured by their owners and outlasted many pots of lesser value. Thus, while the best of the L. M. I wares were no longer made, a certain number of these fine vases still remained on the house shelves at the time of the destruction of the town. There is no proof that this destruction took place at a later date than did that of Gourniá and Pseira, and probably all were involved together in the same catastrophe. On all three sites the imported vases of L. M. II had just been introduced when their development was cut short by an overwhelming

destruction, and that this took place toward the end of L. M. I seems clear, since the poorer class of local ware, though past the highest stage of its development, still belongs to this period.

As at Psaira, the desertion of the site in L. M. III points to a period of unrest when settlements on the seacoast were for the most part abandoned, while their inhabitants founded new towns farther inland. Just below Tourloti are the remains of an extensive cemetery of L. M. III, and although the town site belonging to it has not been discovered, it is evident that it was in this neighborhood that the new Mochilos was built. The port of the old town was still within easy reach and probably continued in use, but the town itself lay at a safe distance from the sea, out of reach of any marauding ships which might visit this part of the coast.

Before dealing with the buildings east of the church mention must be made of a row of a dozen or more rooms which were opened higher up the slope above Blocks *A*, *B*, and *C*. I had hoped that the Roman buildings might not have reached so far up the hill, but in this I was disappointed. Not enough was cleared to distinguish the divisions of the various houses, and only one road was found, evidently the continuation of that already mentioned as separating Blocks *B* and *C*. The entire range of rooms was absolutely empty except for two astonishing hoards of bronze vessels which had escaped both the plunderer and the Roman builders.

In one corner of a much destroyed basement room belonging to an L. M. I house, and below the level of its earth floor, five bronze basins came to light. They had been hidden in a shallow hole scooped out in the floor and securely built in with small stones, showing that the inhabitants had time to conceal some of their valuables before the attack.

The soil at this point was only a little over a metre in depth and the surface of the natural rock very uneven. The floor of this basement room on the upper or north side was of rock which sloped away so sharply that it required an earth filling against the lower or south wall of the room to make a level floor. It is to this outcrop of rock that we owe the preservation of these bronzes, as the Roman builders touched the rock on the upper side of the room but did not trouble to cut through

the earth filling on the lower side in carrying their wall over the top of it. The four largest basins were stacked one inside the other, while the fifth, which is more properly a bowl and is smaller, was standing beside them. Two of these basins were of the type of Figure 10, which shows the larger of the two, and are in perfect condition owing to the fact that they lay inside and were covered by two other basins

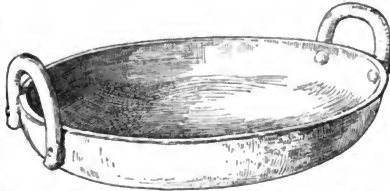


FIGURE 10.—BRONZE BASIN: L. M. I. (Scale 2:9.)

of the type shown in Figure 11 (from another deposit). The largest of the five, which lay at the bottom and bore the weight of the other three, is broken in several pieces, but the one on the top was in good condition. The small bowl, being of much thinner material, was badly rotted. All the five are quite



FIGURE 11.—BRONZE BASIN: L. M. I. (Scale 1:4.)

plain. The type of Figure 11 is well known from Cnossus, where some very finely decorated specimens were found in 1902 (*B.S.A.* Vol. IX, pp. 124-127, Figs. 77-82).

A little farther along the slope, in what must be another house, as it lies across the roadway, the basin of Figure 11 was discovered under similar conditions. This, although badly

rotted, is a much finer example of its class than are the five just described. Like the Cnossian basins it has elaborately decorated rim and handle. In this case the design is a band of



FIGURE 11 G.—BASIN,
SIDE VIEW.

spiral coils along the rim moulded in high relief, while the handle has three similar bands of decoration. The design is not uncommon at Cnossus, where it is frequently met with in architectural decoration, to which it is singularly well adapted. The body of this vessel was in very bad condition, but the heavier parts, such as the rim and handle, are well preserved.

All these houses showed traces of fire where any of the original L. M. I stratum could be recognized. The soil, as I have said, was shallow in places, and the L. M. I builders had cleared away nearly all the remains of the earlier houses, so that when the Romans in their turn swept away the houses of L. M. I very little remained. Apart from the bronzes not an entire vase and very few potsherds were found in the whole range of rooms, so that no further digging was attempted at this point.

While half the force had been clearing Blocks A, B, and C, the other half had been working along the water front east of the church. Here the houses were all of large size, with massive outer walls, and showed by the presence of central column bases in some of the rooms that they possessed important upper floors. The small jar, Figure 12, came from a room of the first house east of the church, which otherwise was quite empty, the Roman walls lying in the actual L. M. I level. In every part of this house where pits were sunk below the L. M. I floors they yielded many fragments of M. M. I and E. M. II and III.



FIGURE 12.—SMALL
JAR: L. M. II.

From the E. M. II layer comes the fine stone vase shown on PLATE VIII, No. 2 (scale 2:3). It is of a green soapstone, opaque and very heavy. The material is the same as that of

many vases from the cemetery, found in tombs of E. M. II and III date, but is not known elsewhere in Crete. On the bottom is a sign like two conventional arrow heads, probably the owner's mark. Inside, the stone core, left by the circular drill, has been broken away unevenly, leaving a part of the core still in place. This affords certain evidence that the circular drill was already employed in these early periods. These drills must have been merely hollow reeds which were used with sand, as no metal instrument of this sort has yet been found in Crete on the many sites that have been excavated. At first it was hard to believe that this vase actually belonged to the deposit in which it was found, although the shape and the pierced horizontal handles have an early look. The finish, shape, and material are so superior to anything hitherto assigned to so early a period that, had no further evidence been forthcoming to prove its place in the E. M. II, I should have been inclined to think that it had reached this early deposit from a higher level.

The Mochlos cemetery has thrown an entirely new light on E. M. II and III, and our views of them as primitive periods must be modified. It has now been proved that E. M. II and III were the age of stone vases *par excellence*, just as M. M. I was that of polychromy. In no succeeding period did the art of stone cutting reach so high a level at these small sites in eastern Crete. In the early periods the materials are all of the finest quality, many of them hard stones, and the black steatite so common in L. M. I does not make its appearance in any quantity until M. M. I, when the art of making these fine vases was rapidly declining.

These vases and the goldwork from the Mochlos graves show that E. M. II and III were far from primitive in the true sense of the word. The eye for design, it is true, was still in a more or less undeveloped state in E. M. II, but in E. M. III was already far advanced. The clay and finish of the mottled ware, as found at Vasiliki, are of wonderfully good quality, and these vases were certainly made on a wheel. A certain amount of the earlier dark-faced burnished ware lives on as late as E. M. III, but only for certain vase forms for which this older technique was retained as long as the shapes continued to exist. The intermediate stage of development that lay between the

very primitive culture of E. M. I as found on these sites and the advanced state of civilization as we see it in E. M. II is not yet to be clearly traced, although it seems probable that it began with the fine subneolithic incised gray fabrics and the very primitive dark on light geometrical wares, which were found immediately underlying the true E. M. II floor levels at Vasiliki, with their advanced mottled vases. The dark burnished ware lasted throughout these changes but naturally was far more prevalent in the earliest stages than in the fully developed E. M. II and III deposits. One cannot but wonder at the time and patience expended by these early craftsmen on the stone vases of the Mochlos graves. It seems clear that they were not turned, but were roughly hewn into the required shape and then polished by hand. How long such a process took when the vases were of hard materials can be imagined with difficulty, but the contents of some of the larger tombs must represent the work of many years.

To return to the description of the house deposits, the clay boat (Fig. 2, No. 2) comes from the same context as did the stone vase (PLATE VIII, No. 2). Clay boats are very common in these E. M. II and III levels at Mochlos but are, as a rule, of a less developed type. They usually show the high bow and stern so typical of primitive ships, but in this case we find four clay excrescences, two on each side of the hull, which doubtless represent the pegs or thole pins for the oars, a form of rowlock still in use in Cretan boats of the present day. In none of these clay models are there any signs of masts, or even a place for stepping one, although there is no reason to suppose that a people who knew the use of boats at all did not also use the sail. A little above this deposit in the same rooms were some fragments of M. M. I polychrome ware and one or two imperfect vases of the same period. Three vases from another room of this house belong to L. M. I and repeat the familiar wreath pattern on two small ewers and a squat amphora.

The next house, separated from that just mentioned by a very heavy wall, ceased to be occupied in the early part of L. M. I. It was badly cut into by the big house *D*, described below, in which it was partly incorporated, a higher floor level being formed over a confused mass of M. M. III and L. M. I

pottery of the best class. In Roman times it was so disturbed that nothing can be learned with any certainty as to stratification until the E. M. III level is reached; this seemed to lie directly beneath the M. M. III and L. M. I deposit. This deposit was originally very extensive, but a part of it was swept away in building the house, apparently in M. M. III.

Altogether eighteen vases were found, most of them nearly entire. The whole space confined by the M. M. III foundations was filled with these broken vases packed into a clay soil over which the floor of the later room was laid. The parts of the various vases were very much scattered, and the partial cutting away of the upper layer of the deposit in M. M. III accounts for numbers of sherds indicating the existence of vases which have otherwise entirely disappeared.

As a whole the deposit belongs to the transitional period when E. M. III was just merging into M. M. I, and although certain true E. M. III designs remain, most of them show strong M. M. I influence. On one of the round-bodied cups, typical of E. M. III, we find a broad band of red paint, while another fragment shows several bands of alternate red and white. This proves that polychromy was introduced toward the end of E. M. III, and in deposits of this class it is hard to say to which period the vases are most nearly related. No fragment of the side-spouted bowls so characteristic of the Early Minoan period occurred with these vases. The straight-sided cup with the barred triangles (*Trans.* Vol. II, Part 2, p. 120, Fig. a, c) has widened out and has a strap handle, while the triangular design has shrunk to a small edition of its former self and runs around the rim of the cup enclosed by broad festoons of white paint (Fig. 13, No. 3, upper row). Also the beginnings of the M. M. I style of dark paint on a light ground have been introduced, and many of the sherds and fragmentary vases show elementary designs like those found in 1907 in M. M. I houses at Pseira and also in the same context at Vasiliki in 1906 (*Trans.* Vol. II, Part 2, pages 126-128, Figs. 9, 10, and 12).

The E. M. III plate (Fig. 8) has grown smaller and deeper, while it is no longer painted except for a narrow dark band around the rim. The black burnished wares have quite disap-

peared and a ware of unpolished, gritty, red clay of poor quality has replaced them for the commoner vessels.

The round-bodied cup of E. M. III (Fig. 13, No. 1, upper row) still lingers on in a small quantity, but a new type appears with it in which the body has a strongly marked central ridge and a distinct base. The best object from this deposit is a two-handled cup of this sort (Fig. 13, No. 4, upper row). The



FIGURE 13. — VASES: E. M. III. (Scale 1:8.)

clay is very thin and of metallic hardness. The paint is of excellent quality and the white has survived in as fresh a state as on the day when it was applied. In fact, one of the most marked points of difference between E. M. III and M. M. I is in the quality of this white paint. In E. M. III it is never of the soft chalky quality that is so characteristic of M. M. I, and presents a surface as hard and smooth as any paint used in the later Minoan periods. Where deposits of these two periods are found together in the same sort of soil at the same depth, the difference is most marked in the effect of their long burial on these two varieties of white. The M. M. I paint is always so

soft and chalky that it can be removed with a touch of the finger, a fact which renders the cleaning of this ware most difficult. On the whole the difference in these white paints seems the most satisfactory means of separating the two periods one from the other, since at the end of E. M. III the designs on the vases might belong to either.

The cup of Figure 13, No. 2, upper row, presents a new shape and design for this period, although it shows more of M. M. I influence in its appearance than E. M. III. The shape is a prototype of one which becomes common later in a modified form, and which lasts on into L. M. I in the black glaze cups with white designs, usually spirals around the rim.

The house *D*, in which these rooms were partly incorporated, is the largest and most pretentious found thus far on Mochlos.

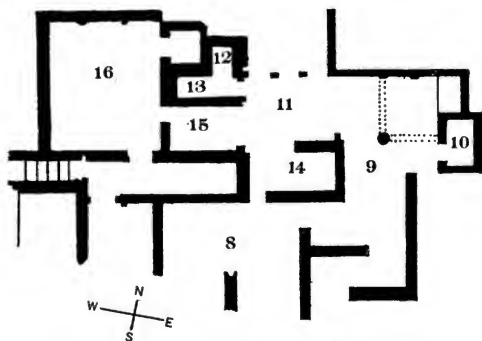


FIGURE 14. — HOUSE AT MOCHLOS. (Scale 1 : 200.)

From the fact that it cut into rooms belonging to the earlier part of L. M. I, it would appear to be the result of a rebuilding which could only have been finished a short time before the destruction of the place. The central or remodelled portion of this house is shown in Figure 14. The walls of the newer part are, as a rule, of brick clay, sometimes strengthened by small stones. As the house was destroyed by fire, these brick walls have been thoroughly baked in the process. A great deal of

wood was used, as all the door jambs were braced with wooden posts and the ceilings were supported by heavy joists, the charred remains of which were found in all the rooms.

The south side of the house, room 8, seems to have been a sort of portico on the water's edge, with a central column to support the weight of the upper floor. This column was evidently found to be too weak in itself to support the required weight, so that a small wall was built to brace it on the outer



FIGURE 15. — DETAILS OF HOUSE.

or south side. This wall, where it came in contact with the wooden column, was smeared with brick clay which partly encased the column itself, making it all one solid mass with the wall behind. This wooden column has naturally disappeared, leaving the clay shell still in place to the height of eighty centimetres. The impression which remains gives us the original diameter of the column, fifty centimetres, and can be distinguished in Figure 15, at the back of the picture and a little to the right. The column appears to have been a roughly trimmed log, and in the clay mould there is no sign of its tapering toward either end.

The main entrance of this house has not been found, and the

fact that no roads have come to light on this slope of the hill makes its position uncertain. From the portico a flight of steps may have led down to the water's edge, but the house must have had a land approach as well, perhaps higher up the hill at the back. Passing from the portico, 8, through a doorway, one enters a large megaron, 9, of peculiar arrangement. This room is of irregular shape with a large column base near the centre. To the right of this base is a large recessed seat



FIGURE 16.—DETAILS OF HOUSE.

let into the wall, with a square space in front of it covered with a floor of plaster. The rest of the megaron is paved with flat slabs which, as they lie at a slightly higher level than this plaster floor, form a sort of ledge around its outer edge. In Figure 15 this column base is shown a little to the left. Figure 16 shows its relation to the recessed seat and the square of plaster flooring.

To the right of the bench a door opens into a small paved room, 10, so small that it may have served as a bath. There is no sign of an outlet hole for water, and if the room was used for bathing purposes the water was probably contained in a

portable terracotta vessel. This room appears on the right of Figure 16.

At this point the house was so cut into in Roman times that it is difficult to say whether it extended any farther to the east.

Back of this bath and the recessed seat lie three narrow rooms at a lower level. Their construction is in the style always associated with the earlier part of L. M. I, but the objects found in them indicate that they were still in use when the town was destroyed. They do not connect at present with house *D*, but, from various pieces of evidence, it seems clear that they were a part of it. House *D* must have included all the rooms on this part of the slope both east and west of the megaron, as there are no heavy outer house walls to mark the division between different buildings. In the later part of L. M. I the central portion of the house was entirely rebuilt and betrays architectural ideas borrowed from the great palace sites. The recessed seat, triple doorway, and in fact all the portion shown on the plan, belong to this reconstruction.

The two wings of the house, lying one on the east and the other on the west of this central core, were left in their original condition, with no architectural changes, which accounts for the marked difference between the various parts of the same house. In the small palace at Gourniá the same methods were employed, and it was only in the central portion and the street façade that the ashlar blocks and other features of palace architecture were introduced. Wherever the older walls of the first building were concealed from view, they were left in their original state, and the whole aimed at a veneer of elegance to impress the passer-by.

Along the sea front east of the three rooms mentioned above, a very heavy wall, well built of roughly squared stones, was found which evidently belonged to an important building. This turns a corner a little farther to the east, and running up the hill makes a right angle with the reconstructed rooms of house *D*. Although not enough has been cleared on this part of the slope actually to connect this wall with the large house, there is no doubt that we have here its easternmost boundary, though how far it extended up the slope is still uncertain.

The clay vases from these three small rooms belong to the same late stage of L. M. I as do the vases from the neighborhood of the megaron in the reconstructed portion of the house. Below the floor level a few cups of a slightly earlier class were found, showing that these rooms were built in M. M. III and continued in use throughout the L. M. I period. In one corner of the room lay a small standard lamp of black steatite badly rotted (Fig. 21, No. 2). It has a very broad, shallow type of basin on a slender foot, a shape which usually precedes the characteristic standard lamp of L. M. II, with its small basin on a tall, thick pedestal. Another object found here is shown in Figures 17 and 18. It is made of a species of limestone and would also seem to have been a lamp, since the two pointed ends are slightly hollowed out, as though to receive a wick. The base shows that it was intended to be used on a



FIGURE 17. — STONE LAMP: L. M. I.
(Scale 1:8.)

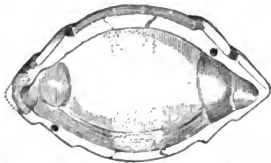


FIGURE 18. — STONE LAMP: L. M. I.
(Scale 1:8.)

socketed stand of some kind, probably of terracotta, like that found in Block *B*, west of the church. Two curious holes are pierced in the rim, one on each side of the vessel and diagonally across from one another. They may have been used to suspend the vessel by cords, as they are so placed that when suspended it maintains a perfect equilibrium. The shape seems to be borrowed from a floral idea like the common Minoan "blossom" bowls, although in this case the full-blown flower is represented instead of the bud.

To return once more to the central megaron, 9, of house *D*, we find on its north wall to the left of the bench the remains of two clay pilasters which served to relieve the otherwise blank wall. One of these is shown in Figure 16. A very broad doorway in the west wall of this megaron leads into another smaller hall, 11, which forms the central point of the

house, with doorways opening into it on all sides. This hall is unpaved, and was choked by great masses of burnt beams, bricks, and unpainted vases, all of which had fallen from the upper floor. In the doorway and extending as far as the column base of the megaron were hundreds of clay cups of the common unpainted type. These, too, had fallen from the upper floor and formed a solid mass nearly eighty centimetres thick,



FIGURE 19.—JAR: L. M. I. (Scale 1:8.)

filling the entire northwest corner of the megaron. Large deposits of these cups are often found, but so far I have never seen so many in one mass. They had been piled one inside the other, and in falling from the room above, these *rouleaux* were almost without exception shattered. Two painted vases were found mixed with these cups, one of which, the “waisted”

strainer (Fig. 4, upper row, No. 2), was oddly enough unbroken. The other painted vessel is the large jar shown in Figure 19, which is a very fine example of its kind. Such jars occurred frequently at Gourniá and Pseira, although this one is of better quality and in better preservation than was the case with those from the neighboring sites.

The north side of the hall, 11, consists of a triple doorway with two supporting posts. These posts were of clay with wooden braces at the front and back, the whole standing on a stone base (see Fig. 15, foreground to the right). A large part of the architrave that they supported was found approximately *in situ*. This was also of brick clay braced by thick wooden beams, but unfortunately could not be kept in place, as the column beneath was entirely shattered except for a portion near the base. Doorways of this type are most uncommon on these small sites. Only one house at Pseira was built in this fashion, and at Gourniá only the palace. The use of a central column in rooms is often met with, but the triple and double doorway always indicates the architectural influence of the great Minoan centres of artistic development. Such doorways usually date the houses in which they are found at the close of L. M. I, when these towns entered into very close communication with the capital. It was only the governor or the wealthy merchant who could afford to bring these Cnosian fashions into the small coast towns. The excavations could not be carried beyond this triple doorway, which was discovered at the very end of the season, so that we have no idea of the extent of the house in this direction.

Immediately on the left of this doorway lie two small closets (Fig. 14, Nos. 12, 13), which contained two pithoi, one in each, and seemed built for that especial purpose. Opposite the triple door lies another slightly larger compartment (No. 14), through which by means of a door one can reach the south portico (No. 8). No. 14 contained several large painted jars. This house, as I have said, showed signs of having perished in a great conflagration of so violent a character that almost all the objects found in it are badly charred and blackened. The action of this intense heat on the pottery has been very disastrous, and two of the fine jars from No. 14, painted with graceful lily

designs, are almost entirely destroyed. Another jar from this room (Fig. 20) is better preserved. It shows a style of decoration often met with on jars of the poorer sort, particularly the coarse plant motive around the base. The fourth and last jar was unpainted, but had a crude lily incised on the shoulder while the clay was still moist. These vases show traces of details worked out in white and added bands of red which mark them as belonging to the end of L. M. I. This was the



FIGURE 20.—JAR: L. M. I. (Scale 1:8.)

only deposit of painted ware found in this part of the house. These four jars were still standing along the wall of room 14 in their original positions and must have been used for household stores of some sort. The best and largest of all is so badly burnt and cracked, and shows so many traces of fire inside and out, that it probably held oil or some other inflammable material.

Room 15 contained a great mass of three-legged cooking pots

which had fallen from an upper room. None were found entire, but they represented almost as astonishing a hoard as the cups from the megaron. Passing through 15, one enters a small court, 16, about five metres long by four wide. This court was probably open to the sky, as it has no stone pavement and showed no signs of burnt roof timbers, such as were found in all the other rooms. Instead it was choked with masses of brick clay, apparently the upper walls of the house, which had fallen into it at the time of the destruction.

On the north wall of this court are the remains of two semi-engaged wooden pillars, so that we can imagine that this side possessed a sort of ornamental façade. Some pieces of plain red stucco would show that it was painted as well. Unfortunately this wall was so pushed out of the perpendicular by the weight of the earth above that all the upper course had to be removed before the court could be excavated. The existence of one of these wooden pillars, or rather pilasters, is quite certain, as the charred remains of the wooden post were still in place. The existence of the westernmost pilaster is not so sure, as the wall here was badly preserved. There seems to have been a break in it at this point, and remains of burnt wood were found lying on the floor of the court where such a pilaster would have fallen if loosened from its socket.

The only find made in this court was one of the circular portable plaster "hearths," such as the one found by Mr. Evans in a chamber tomb at Zafer Papoura (*Prehistoric Tombs*, p. 36, Pl. LXXXIX, *a*). This hearth is of coarse brick clay, covered with a coat of fine white plaster on which are painted bands of red. It shows no signs of fire, and may therefore have served as a table in this case instead of a hearth. A similar object found in the Gourniá shrine would seem also to have served as a table (*Trans.* Vol. I, Parts 1 and 2, p. 40).

In a number of places in this house were found human bones badly charred, showing that the destruction was no peaceful one, and that many of the inhabitants perished with their houses. This same fact had been already noticed in other houses to the west of the church, and when combined with the signs of fire found in every house would tend to show that the sack of Mochlos was more than usually severe.

At Pseira and at Gourniá only a few houses had been burnt. Very few human bones were ever found in or near the houses on these two sites; the inhabitants must therefore have been more successful in escaping the enemy or of a less warlike nature than the townspeople of Mochlos.

At the end of the season I made a cutting higher up on the southeast slope to see if it offered possibilities for another season, but the result was a negative one. This row of rooms, like the upper row on the southwest slope, was entirely covered by Roman buildings, which had cleared away almost everything to the M. M. I level, and this itself had nearly disappeared. As the soil is of no great depth, none of the earliest periods were



FIGURE 21. — STONE LAMPS: L. M. I. (Scale 1:9.)

represented by anything more than sherds, and although more concealed hoards of objects, such as the bronze basins, might come to light, the prospects for a future season are decidedly bad. In the row of fifteen rooms which were cleared only two finds were made, both in the same room. They are two stone lamps; one of black steatite is of the common type, but the other is a really fine lamp of purplish limestone. It is of massive shape with a carved collar of drooping leaves, very similar to one of the same material found at Pseira in 1907 (Fig. 21, No. 1).

The most curious fact about these lamps is that in the many found at Pseira, Gourniá, and Mochlos not more than half a dozen show any traces of burning about the opening for the wick. Though such traces of fire might not be noticeable in the case of black steatite lamps, one would certainly suppose

that on this purplish stone such marks would be clearly visible if the lamps had ever been actually used.

With this last cutting excavations on the town site came to an end, although work was carried on for three weeks more at the cemetery. The actual space cleared is very small compared with the inhabited area, but on a site so built over in later times the only place where earlier objects can be preserved is where they are covered by a great depth of soil. The deepest parts of the site have been excavated for the most part, and the two cuttings made higher up the hillside do not encourage the idea that much would be gained by clearing the houses of that quarter. The large house is worth finishing, although it cannot extend much farther up the hill, as a cutting about twenty metres farther up the slope revealed only the scanty remains of small L. M. I houses.

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LONDON, *September*, 1908.

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at Athens

A SERIES OF SCULPTURES FROM CORINTH

II. A HELLENISTIC GIGANTOMACHY

THE sculptures discussed in my previous article (see pp. 158-169) are works of the Hellenic period, the latest of them, the maenad base, being a work of the fourth century. The Hellenistic period proper is represented, I believe, by a long relief of the gigantomachy, of which we have very considerable remains. They were discovered in the theatre, in a trench near the centre of the stage building, between May 15 and June 4, 1903. Their extremely fragmentary state and the fact that mixed in among them were found fragments of other sculptures quite incongruous in style and size, suggests that they had been collected to burn for lime. Hence the finding-place does not necessarily give a clue to their original position. The material at hand, though enough to offer a very clear notion of the style and technique, and a general idea of the subject, is too incoherent to permit any attempt at actual restoration. I shall therefore dispense with a description of each single fragment, and limit myself to an indication of the principal ones, with such discussion of their common characteristics as may help to determine their period and artistic value. The material is a coarse-grained marble of a creamy patina, but showing a bluish cast on the broken surfaces. It contains a good deal of mica, and tends to split away in long flakes. The relief was high, with arms and legs often worked free from the background. It was set on a plinth averaging 0.14 m. in depth (from the background to the front edge), but varying occasionally from 0.11 m. to 0.165 m.¹ The usual height of the front of the plinth was about 0.065 m., subject to variation from

¹ The variation was not attended by an inverse variation in the thickness of the relief-ground, but involved a change of actual thickness in the slabs employed from 0.14 m. to 0.22 m.

0.06 m. to 0.095 m. The height of the relief may be roughly calculated from the proportions of the existing figures. The heads average 0.14 m.; in one case at least,¹ the relief-ground is continued above the head to a distance of 0.06 m. before reaching the upper edge. Assuming that the figures measured seven heads, a proportion which, if we take into account the dimensions of the limbs which are preserved, does not seem improbable, we should have 0.98 m. for the average height of the figures, and 1.04 m. for the total distance from the plinth to the upper edge of the background. In a scene of violent combat it is of course possible that no figure stood drawn up to its full height. Yet even making allowance for this, the distance from the top to the bottom of the background can hardly have been less than a metre.

The finish of the background and the plinth presents certain interesting peculiarities. The reverse of the relief is quite smooth, with a dull polish. Along the lower edge of such places as are preserved to the base are traces of what seems to have been an offset or moulding of some sort, now roughly knocked away. In one case the roughened band whence the moulding had been knocked away is preserved in its full original breadth² and meets the lower surface of the plinth at a right angle. In this case the lower surface of the plinth is level, but roughly dressed. In most cases, however, the upper edge of the moulding alone remains, and the surface below has been rudely bevelled off, meeting the lower surface of the plinth at an obtuse angle. In such cases the bottom is often not dressed at all, but rudely hacked away. One piece³ shows the usual smooth back and the mutilated offset, but the depth of the offset is but 0.01 m. and the under side is finished with the same great care as the back. Another piece which presents an individual peculiarity is that to which the torso reproduced in Figure 11 is attached. The back is, as usual, smooth, but across it at a height of 0.16 m. from the bottom of the fragment runs a set-back of 0.01 m. to 0.02 m. in depth — a clean, horizontal cut.

¹ That of the bearded god, Fig. 8.

² Accession No. 460.

³ Not reproduced; inventory No. 660, fragment of background with back part of plinth on which rests a rather hastily executed foot.

The top of the relief-ground is dressed rough, and not even carefully levelled; it was evidently used under some sort of moulding or cornice. Only one piece remains with a vertical edge;¹ this is carefully cut on a straight line, but as the joint surface is roughly dressed, it can hardly have been intended that the joint should be visible. It must rather have come from an end, where it could have slipped under a moulding or pilaster. I have nowhere found traces of cramp or dowel holes.

These technical indications suggest that the relief had been used in different ways at two different epochs. The finish of the back shows that in its original state it must have been a parapet or barrier, intended to be visible from both sides; it was placed so that the lower edge of the plinth was hidden from view, probably to a depth of from one to two centimetres below the edge of the offset. The block with the finished under surface shows that at one point it must have crossed an open space (possibly a drainage canal), and also indicates the depth to which the other blocks were hidden from view. What the reason for the set-back on the block with the torso (Fig. 11) may have been, I cannot suggest, nor can I offer any sure explanation of the purpose of such a parapet. Certain details of finish — the flat and poorly executed tops of the heads and the flat finish of the drapery over Zeus's left shoulder² — indicate that the relief was intended to be seen from below. Could it have been a parapet along the top of one of the Greek terrace walls?³

At some subsequent time the offset was knocked away to the plane of the upper back surface, probably with the intent of setting up the relief against some vertical surface. It is possible that at the same time the mouldings which may have adorned the upper edge were knocked away to allow the relief

¹ The fragment with the hand brandishing a club, Fig. 5. ² See Fig. 3.

³ It is interesting to note that the Gigantomachy from Priene (Brit. Mus. Nos. 1165 to 1176) shows similar evidence of having been used as a parapet. The slabs are set into the wall, so that it is not easy to observe details of finish, but the bottom is rough like ours at Corinth, and Wolters, who has had opportunity to study the fragments in the storerooms of the Museum, says (*Jb. Arch. I. I.*, p. 56) that the top and the vertical joints were dressed rough. The back is, however, not smooth, but merely hacked out. See besides the article by Wolters, the British Museum Catalogue, Vol. II, p. 156.

to fit under a cornice, though it is also possible that a separate cornice was employed from the first. The later set of workmen were summary in their handling, and left the under side without even a rough dressing. This second use of the reliefs remains even more of a mystery than the first. They may possibly have formed a sculptured band across the front of the stage in the Roman theatre, though the evidence we have at present does not seem to point strongly in that direction.

Let us turn now to the single fragments and see what we can glean from them as to the *dramatis personae*. To the party of the giants we can attribute at least six principal fragments.

1. (Fig. 1.) Inventory No. 469. Fragment of plinth and background on which rests a right leg from thigh to knee, ending below the knee in a



FIGURE 1.—FRAGMENT OF GIANT FROM THE GIGANTOMACHY, CORINTH.

serpent coil. Length of thigh from plinth to top of fragment 0.27 m. Fitting this fragment by direct contact, both at plinth and crotch is a left leg from thigh to knee (inventory Nos. 472 and 649), at the lower end of the back, hollowed out a little, as if to allow for the passage of some rounding object, an opponent's foot or a serpent coil; higher up, on front, remains of a square protuberance whence a serpent's head or some other attachment had been broken away.

2. (Fig. 2.) Inventory Nos. 571 and 470. Piece of plinth with background broken away except at the right end of 470. On this rests left leg



FIGURE 2. — FRAGMENT OF GIANT FROM THE GIGANTOMACHY, CORINTH.

ending in serpent; serpent's head, large, blunt-nosed, bearded, rests against outside of thigh. On rock behind coil lies a roughly sketched left hand with a bit of wrist bent at right angles to the hand; rather large in proportion to the rest of the figure, but evidently belongs to it.



FIGURE 3. — HEAD OF GIANT FROM THE GIGANTOMACHY, CORINTH.

2 a. (Fig. 3.) Inventory No. 530. Bearded head with neck turned sharply to the right and upward; hair thick and disordered; eyebrows contracted as if in pain; nose of irregular shape appropriate to giants, satyrs, and centaurs. Length of head to bottom of beard 0.135 m. May easily have belonged to foregoing fragment, which was kneeling with weight thrown back and supported on the left hand, probably with right arm raised in a last effort at defence and gaze strained upward toward opponent at his right. A similar pose is seen in the giant *Parthenios* on the Pergamon frieze.

3. Inventory No. 521. (Not illustrated.) Lower portion of torso, figure lying on right side, trying to raise itself, and bending up the left leg sharply at thigh. Part of a defeated giant, since no god could be represented fallen. Length of fragment 0.15 m.

4. (Fig. 4.) Inventory No. 657. Piece of background to which is attached a youthful head turned slightly to the spectator's right; asymmetrical; less carefully worked on the left. Thick hair in disordered locks, brows slightly contracted, nose irregular, mouth set too far to the left. Length of head 0.133 m. The type is rather that of a giant than that of a god. The face is turned to the spectator's right, and, so far as one can infer from what is left of the neck-muscles, has the same direction as the missing torso. The head then probably did not belong



FIGURE 4. — HEAD OF GIANT FROM THE GIGANTOMACHY, CORINTH.



FIGURE 5. — FRAGMENT FROM THE GIGANTOMACHY, CORINTH.

to No. 1, which turns to the left, nor to No. 2, whose head would have been more sharply in profile.

5. (Fig. 5.) Inventory No. 547. Piece of background with hand grasping branch, to which can be fitted an arm bent at the elbow (inventory No. 547 *a*). On background 0.07 m. from the upper edge and 0.15 m. from the left are two letters Σ I.¹ The arm is very short, only 0.116 m. from wrist to elbow, whereas the giants' heads are over 0.13 m. long; hence the first impulse was to interpret the arm as belonging to Heracles. The weapon, however, is not the knotty club of Heracles; it is a rough tree-branch, such



FIGURE 6. — FRAGMENTS FROM THE GIGANTOMACHY, CORINTH.

as is regularly used by giants and centaurs. Therefore the arm must be attributed to one of the giants. It could not be connected with No. 1, because of the greater thickness of the background (its minimum thickness is 0.04 m., while that of the ground of No. 1 is 0.025 m.). In pose it is out of the question for No. 3 and is unlikely for No. 2, while it seems hardly probable that so small a hand could be connected with No. 4, the larger of the two heads. Hence it probably belonged to a separate personage. Thus the fragments discussed must belong to at least three giants, and admitting the probability that Nos. 4 and 5 belonged to separate individuals and the possibility that No. 2 *a* did, they may represent six.

¹ These may possibly be explained as mason's marks. The slab probably occupied a position at an end or natural division of the composition, where the letters would be inconspicuous, and when the other marks were chiselled away, these were overlooked.

Of the Olympians we can trace a larger number, and identify several.

1. (Fig. 6.) Athena. Inventory No. 465. Piece of relief with left hand over which falls plumed aegis with three serpents along the edge. Hand grasps one of the serpents. Across the fingers from the first joint of the thumb to the outside of the little finger measures 0.057 m. With this may not improbably be connected the legs of a draped figure from almost the upper end of the thighs to the ankles. (Fig. 7.) In three pieces, inventory Nos. 466, 468, and 478. The figure moves rapidly toward the spectator's right, the left knee bent, the drapery sweeping back in ordered folds. The garment would appear to be a Doric peplos open on the right side and belted over the *apoptygma*—the regular costume of Athena, and the motive, both in



FIGURE 7. — FRAGMENT OF ATHENA (?) FROM THE GIGANTOMACHY, CORINTH.



FIGURE 8. — HEAD OF ZEUS (?) FROM THE GIGANTOMACHY, CORINTH.

the pose and the general lines of the drapery, suggests the Athena on the Pergamon frieze. It seems, then, quite possible that the legs as well as the hand may be given to Athena.¹

2. (Fig. 8.) Zeus (?). Piece of slab with head and shoulders of bearded god, put together from inventory Nos. 516 and 528. The shoulders are turned slightly to the spectator's right, with the left arm, over which falls a bit of drapery, extended at shoulder height and the right apparently (from the position of the collar-bone) raised above the head. The head has been broken away along a line slanting from the upper part of the nose back to the lower edge of the jaw, so that lips, chin, and the lower part of the beard have been lost. The contact surfaces are

¹ A similar motive is seen in the robe of the Adrasteia and of the Asteria of the altar at Pergamon.

preserved, however, at the back of the neck and on the slab. The right eye and the hair have been bruised. The face on the left side is merely sketched in, but the light and shade masses in the eye are suggested with a good deal of sensitiveness. The hair is full, confined by a fillet around which the long locks at the back are rolled. The locks on top of the head are merely blocked out, and the upper side of the drapery is not modelled at all, but cut back level to the background. Measures from crown of head to base of nose 0.125 m., and allowing for a mouth and chin slightly less than one-half the length of the upper part of the face, the whole head must have measured 0.17 m. to 0.18 m. To the same figure seems to belong a slab put together



FIGURE 9.—FRAGMENT OF ZEUS (?) FROM THE GIGANTOMACHY, CORINTH.

from inventory Nos. 526, 527, 531, and 570. (Fig. 9.) It represents the lower part of a draped figure from the thighs to a point well above the ankles, moving to the spectator's right. The whole front of the right thigh has been broken off, and many of the folds have been chipped. The chief reason for combining the head and shoulders with the lower part is the size, for both are larger than any of the remaining fragments. But there is also a kinship between the breadth and dignity of the folds, so different from the feminine delicacy of Athena's robe, and the quiet majesty of the head. It is these spiritual traits as well as the actual dominance in size which incline one to see in the figure a Zeus. It must be admitted that a Poseidon or an Asclepius

would also be likely to wear a cloak wrapped around the lower limbs and caught up over one shoulder. Yet Asclepius is not among the usual figures of a Gigantomachy, while, other things being equal, the great size of the figure is more appropriate to the king of gods and men than to his brother.

3. (Fig. 6.) Ares (?). Inventory No. 536. Right shoulder armed with a cuirass. Maximum length of fragment 0.165 m. Two layers of leather (?) flaps, under which appears tunic sleeve, caught up to pass through arm-hole at back of shoulder. Front side of shoulder roughly finished, back worked out carefully. This fact, taken with the tiny bit of background remaining, leads one to infer a figure seen from three-quarters back view, retreating into the background and toward the spectator's right. It does not seem likely that the corselet was worn by a giant. In that case one must assume that here, as at Pergamon, some of the giants were represented as entirely human and armed. But there is no other evidence that the giants were here represented in the variety of the Pergamene composition; we have found no traces of wings and no sure traces of a giant in entirely human form. Moreover, one of our giants carries the tree-branch, a regular attribute of the wild tribe

on the later red-figured vases, but not used at Pergamon, where the giants are either weaponless, or wield human armor. Altogether, it seems rather more probable that our giants were consistently of the monster type, and that the armed shoulder belonged to an Ares¹ or armed hero.

4. (Fig. 10.) Youthful god. Inventory No. 572. Youthful torso from neck to pubes (length to top of pubes 0.29 m.); legs broken off at thighs; a small piece of relief-ground clinging between shoulders. The weight must have been thrown on the left side more than on the right; left leg probably bent at hip, and left side inclined slightly forward, with right arm raised, so that the figure was rushing forward to the spectator's right, brandishing a lifted weapon. The figure wears a chlamys, caught on the breast with a round clasp. The action brings out the modelling of the ribs and the muscles of the upper abdomen, but without overemphasis or display of scientific anatomy.



FIGURE 10.—TORSO OF YOUTHFUL GOD FROM THE GIGANTOMACHY, CORINTH.



FIGURE 11.—FRAGMENT FROM THE GIGANTOMACHY, CORINTH. YOUTHFUL GOD.

5. (Fig. 11.) Piece of relief-ground with torso and thighs of youthful god, put together from inventory Nos. 379, 489, and 532. Broken above navel and below knees. With this may be joined a right lower leg from knee to front part of foot, put together from inventory Nos. 520 and 528.² The figure, like Nos. 1, 2, and 4, was moving rapidly toward the right, with the

¹ In the Pergamene Gigantomachy there is no instance of an armed god, but Ares is lost.

² There is only one point of actual contact, at the right side and back of the knee, but pose and finish correspond exactly.

weight on the left foot, and the left knee bent. The body was turned to the left, presenting itself in three-quarters view. The right leg was worked free from the lower half of the thigh to a point just above the ankle, and, while finished highly in front, was cut away behind the knee and calf in the roughest possible manner. Back of the ankle there was a small projection,



FIGURE 12.—HEAD OF HERACLES FROM THE GIGANTOMACHY, CORINTH.

apparently connecting the limb with the background. It was dressed to a roughly concave surface on each side as if to make room for some rounded object, possibly a serpent. The working of the pubes, in this case, as in the preceding, suggests that the figure was youthful; we have, however, among the fragments no unmistakably adult figure for comparison. Length of the right leg from upper end of the thigh to knee-cap 0.25 m.; knee-cap to outer ankle-bone 0.23 m.

6. Part of a left arm holding shield, fitted together from inventory Nos. 522 and 523. Arm from elbow to wrist measures 0.12 m. It cannot be combined with any of the preceding.

7. Goddess. Inventory No. 658. Fragment of relief-ground, with right upper arm extended from shoulder height and seen from back. Wears Ionic chiton, two buttons of which appear on upper arm, hence belonged to female figure. Workmanship further more lax on the upper side than on the lower; good modelling about the elbow. Can belong to none of the foregoing, for Nos. 1, 2, 4, 5, and 6 were seen from the front, while No. 3, though also seen from the back, was itself a right arm.

8. (Fig. 12.) Heracles. Inventory No. 661. Fragment of head wearing lion skin. Broken along the temples and across the root of the nose. No relief-ground left, but quality of marble, finding-place, technique, and proportions all indicate that the head belongs to the group. From top of lion's head to root of nose measures 0.095 m. Head seen full front; eyes set very level, widely open; under and upper lids of equal thickness; brows fleshy and full, though not overhanging.

9. (Fig. 13.) Goddess. Inventory No. 500. Head broken across the brows and on right side of neck. From forehead to chin measures 0.062 m. Halves of face are finished alike, but unsymmetrical in modelling; turned toward the spectator's left. Hair rolled back in full, soft masses from the temple and over the ears. Eyes droop at the outer corners; upper lid casts noticeable shadow; lower almost indistinguishable from the



FIGURE 13.—HEAD OF A GODDESS FROM THE GIGANTOMACHY, CORINTH.

ball near the inner end. Delicate modelling about lips; nose actually shorter than lips and chin (0.029 m., while lips and chin are 0.032 m.). The whole is unusually sensitive and refined in conception and workmanship.

10. Armed god. Inventory No. 677. Small leg from below knees to above ankle, seen directly in front. Wears greave. Cannot belong to Ares, though it was seen from three-quarters back, or to any of the other preceding figures except Heracles or No. 6, for they are all unarmed. As for Heracles, he is not likely to be represented in any other armor than his lion skin, and the fragment seems anyway too small either for our Heracles head or for No. 6. Hence it is almost certain that it belonged to a second armed god.

11. Inventory No. 660. Plinth, finished smooth on bottom, and bit of background. On the plinth, turned to the spectator's right, is a foot, rather hastily sketched, but full of life. Length along the inner side, heel to great toe, about 0.147. Foot planted firmly, but does not seem to have borne much weight. Is too large to belong to the head No. 9, and no other head is turned to the spectator's left.

12. Inventory No. 551. Left shoulder with bit of corselet; evidently wrought to be seen three-quarters view, turned to the spectator's left. Delicacy of the workmanship is equal to that of No. 9, but since the corselet is inappropriate to a goddess, the two fragments could not have belonged together. It is not right in scale to be connected with No. 11; all other fragments of which we have remains are turned to the right. Maximum length of the fragment 0.114 m.

13. Inventory No. 558. Fragment of relief-ground on which are represented in very low relief hoof and lower part of leg of small animal (length of bottom of hoof 0.04 m.), and claws of lion or panther skin. The hoof is too small to belong to a horse of the same scale as the rest of the figures. Its place in the composition cannot in any way be determined, for none of the edges of the slab are preserved intact. On the analogy of an amphora now in Naples¹ where a satyr fighting on the side of the gods wears a *nebris*, this might be interpreted as a part of the fawn skin worn by Dionysus or one of his attendants. The panther skin, as in the majority of the representations on vases² and on the relief from Pergamon, would have formed the cloak of one of the giants.

We have thus more or less surely identified Athena, Zeus, Heracles; Dionysus (or one of his attendants), two youthful unarmed gods, three armed gods, a god bearing a shield, a god whose foot alone remains, and two unnamed goddesses. There are then, besides the three or five (or six) giants, parts of at least thirteen separate gods. Of the remaining fragments it is

¹ *Mon.* IX, pl. VI. Found at Ruvo.

² For references to the vases with representations of the Gigantomachy, see below, p. 319.

impossible to say in any individual case whether they might or might not belong to one of the figures already listed. But in all probability some of them at least belong to figures of which we have no other trace. Hence the number of combatants may safely be assumed to be over sixteen, and indeed, as the contending armies were in all likelihood approximately equal, was probably at least twenty-six.

We have found absolutely no clue, however, to the relation of the figures one to another, no single pair of combatants even, and unless more fragments come to light in subsequent excavations, the composition must remain unknown.

But enough is left to make possible an estimate of the style and period. The first impression of the excavators was "good work of early Roman times."¹ One reason which inclined them to this was probably the thickness of the slabs (about one-sixth of the total height of the relief). Another may have been the wavering proportions. We have seen how the Zeus head must have measured at least 0.17 m., while that of the smaller giant, beard and all, was but 0.135 m. Moreover, of the existing forearms, none measures more from elbow to wrist than 0.13 m., whereas all the heads, excepting perhaps that of the goddess (No. 9), measure 0.13 m. or over; yet the forearm is normally somewhat longer. This shortening of the limbs in proportion to the head is distinctly a Roman trait. Another ground for assuming that the work was Roman may possibly have been the negligence of finish. Parts not actually visible to one who stood in front and a little below were in most instances blocked out with the fewest possible touches, and often even left rough as if they had been broken with a pick (see especially the right leg of the young god, No. 5). Portions near the background and partially hidden were rendered in hasty fashion, rather suggested than actually worked out (arm of giant No. 2; foot of god No. 11). In short, the execution was everywhere done with the greatest possible economy of labor.

But of these motives for placing the relief late, only the second need be considered seriously. The tendency of Greek

¹ *A.J.A.* 1903, p. 350. The statement that the figures are "more than life size" is of course a misprint.

relief from the days of the Parthenon to the Hellenistic age had been to deepen steadily. The thickness of the slabs in the great altar at Pergamon in relation to their height is as one to five, even greater than in the Corinthian relief. Moreover, leaving the actual depth out of the question, the laws of relief composition were applied by the Corinthian artists in a manner essentially Greek, and opposed to the Roman practice. So far as we can judge from what remains, the figures developed themselves freely against the background, overlapping but little, and leaving a certain amount of free space behind and about them. The composition would have been more like the frieze of the temple of Athena Nike or of the Theseum than that of Pergamon, to say nothing of Roman work.

As for the irregularities of proportion, and specifically the shortening of legs and arms in relation to the heads, it is, as has been said, a Roman trait. But it is also found in the less carefully worked Greek reliefs throughout the best period. Take two examples, selected at random from the purest Hellenic work of the finest epoch, the Attic grave-reliefs of the fifth and fourth centuries. Of the two—Conze 115 and 410—neither is by any means on the lowest level of work reached by the stelae; 410 is even wrought with a good deal of expressive power. Yet both show the very fault common in the Gigantomachy—a forearm as short as, or shorter than, the head. And in the Gigantomachy the fault is offset by other qualities foreign to Roman mythological sculpture. The treatment throughout is full of freshness and life. Even where hasty, it shows a grasp on the essentials of a given form and a sensitiveness to artistic effect that characterize the sketches of a master. In the description of the individual pieces we have already touched on this quality. It is enough to recall the Zeus head, the foot No. 11, or the left hand of the giant No. 2, which, though disproportionately large, has caught just the uncomfortable sprawl and flattening that results when one falls back hastily and throws out the arm for support. Such work may be careless; it is not mechanical.

And where the execution is careful, it is worthy of the best period. The anatomy is rendered with first-hand knowledge, sometimes with little fleeting touches of emphasis, as in the

throat and breast of the Zeus (or on the armored shoulder); or with illusive play of surface, as in the head of a goddess or in one or two arm and knee fragments not illustrated. Again, though less surprisingly lovely, there is the suggestion of firm muscle under elastic flesh (the torso of the youthful god, the legs of Athena, the thighs of the giants). Nowhere (except possibly in one or two arm fragments) is the work characterless, and nowhere does it show the elaborate dissecting-room anatomy of the Pergamene sculptures. The same quiet yet sensitive rendering marks the drapery. We have already noticed the power of characterization in the dainty feminine stuff of Athena's peplos, with its long folds that are keen-edged even where they cling closest to the form, and in the heavier mantle of Zeus, swung by the forward motion into broader, more rounded masses. But in his delight in texture the artist never loses his self-restraint. The design is clear and simple, with no perplexing cross-directions, no complicated minor motives, such as one finds often in Hellenistic work. Even the giants' heads, where tradition would naturally have allowed the artist most freedom in heightening effects of pain or fear, reveal the same sense of restraint. The type is fiercer and more unkempt than that of the gods, the brows are knit in effort or drawn up in pain, but there is nothing of the tense agony of the Laocoön or the over-heightened pathos of some of the giants on the Pergamene frieze.

This combination, then, of spontaneity and restraint which runs through conception and execution is so characteristically Greek as to outweigh, in my opinion, any doubts raised by the irregular proportions. But if Greek, to what period does the work belong and what is its relation to the great frieze from Pergamon which has become the Gigantomachy *par excellence*? That frieze has seemed to mark a distinct epoch in the representations of the Gigantomachy. In the earlier sculptured examples, that from the Acropolis at Athens, from the treasury of the Megarians at Olympia, from Selinus, and in the vases of the fifth century, the giants are rendered as purely human in form. True it is that whereas in the sculpture and earlier black-figured vases they usually wear armor and are in every respect like Greek warriors, the later vases show a growing

tendency to represent them as savages, clad in panther skins and wielding tree-branches. In two vases in the late severe style in the British Museum¹ armored and skin-clad giants appear side by side. In only one vase-painting which I have been able to discover, an Apulian amphora from Canosa, has there been a representation of a monster with serpent feet,² and that one has features which make it uncertain whether it is to be regarded as an episode in the Gigantomachy at all. For the period after the Pergamene frieze I have discovered but one relief of the Gigantomachy in which the lower parts of the giants are still intact — the sarcophagus in the Vatican published by Robert in *Die Antiken Sarkophagreliefs*, Vol. III, 94, and in that one the giants are consistently figured as serpent-footed monsters. One feels inclined, then, to attribute the innovation to the artists of the great frieze, and would naturally use the fact that the Corinthian relief has the serpent coils as a proof of its post-Pergamene origin.

Yet our relief is clearly uninfluenced by the frieze of Pergamon. So far as I can decipher the composition and the motives of the single figures, there is but one which strongly suggests the larger work, the pose which I have given to giant No. 2, which resembles that of Parthenios. The Athena, though in both cases moving forward toward the right, wears in our relief the broad, cape-like aegis instead of the narrower scarf, and certainly was not contending with Alcyoneus in any scheme resembling that at Pergamon. The Zeus is turned in the opposite direction in our relief. One of the giants defends himself with the branch of a tree, a motive not used at Pergamon. And in style the differences are as clearly marked. The Pergamene frieze is the logical outcome of that search for elaboration in design and theatrical grace or power in action which came into Greek work at the beginning of the third century — at the period of the Nike of Samothrace and the Artemis of Versailles.

¹ Hydria, Lenormant and Dewitte, pl. III; stamnos, Gerhard, *A. V.* 64. The same mixture of conceptions occurs in a crater from Tanagra ('Εφ. 'Αρχ. 1883, pl. VII) and in a crater "à colonnettes" from the Campana collection, now in the Hermitage (see Reinach, *Répertoire*, I, p. 467), and in a vase from Ruvo, *Mon. d. Ist.* IX, pl. VI.

² Heydemann, *Erstes Hallisches Winckelmannsprogramm, Zeus im Gigantenkampf*.

The ground is filled with a complicated network of figures that cross and recross; the broad lines of the drapery are broken up by minor motives¹; the drapery has also a tendency to twist itself into thick rolls, as in the mantle of the Artemis of Versailles. Textures of all sorts are rendered not by simple differences of surface, but by an elaboration of detail; carefully wrought curls for the hair, crapy texture for stuffs, ribs for feathers—in short, the work is simply brimming over with a lavish wealth of minutiae, the very opposite of the dignified restraint of design and simplicity of execution in the Corinthian production. The smaller work is certainly the successor of the older Greek tradition, and judging from style alone one would like to place it in the third century, not even as late as the quieter first Pergamene school.

Yet, if the use of serpent legs for the giants was first introduced by the second Pergamene school, this early dating cannot stand. The dilemma could be solved if one could find evidence more sure than Heydemann's Canosa vase for the use of the serpent-footed giants at a period antedating the Pergamene school. Such evidence is, perhaps, furnished by another vase mentioned by Heydemann in the same article and published in the *Monumenti*, Vol. V, pl. XII. It is a Campanian amphora from Ruvo, on the handles of which are stamped medallions of Athena combating in one case with a wingless, serpent-footed giant who defends himself with a tree-branch, in the other with a monster similar but for the addition of wings. In the latter case she is dragging back her opponent's head, while he reaches up and grasps her arm, in precisely the scheme of the Alcyoneus on the Pergamene frieze. The motive is so characteristic and unusual that one is forced to assume some relation other than a mere chance resemblance. Heydemann's dating, which he published before the discovery of the sculptures at Pergamon, was the late third century or possibly the early second. Since his day, a strong tendency has set in for an earlier dating, and if we follow the assumption, now general, that the manufacture of this class of vases practically ceased by the end of the third century, it seems hardly possible that the terra-cotta relief was imitated from the frieze; and since, of course, the artists of the

¹ See especially the Dionysus and the Nyx.

frieze would not have drawn their inspiration from a more or less insignificant piece of minor art, one is driven to assume a common type for the two, familiarly adopted and varied as were the types of the Amazonomachia or the Centauromachia. Just what the type was and when it originated need not concern us here. The main point is that the use of serpent-footed giants, if it already existed in the third century, would be no longer a compelling reason for dating the Corinth relief in the second century.

The closest parallel to our relief of which I know is a little torso with bearded head in the Wörlitz collection, published by Robert.¹ It formed part of a sarcophagus decoration, and represented, Robert thinks, one of the gods from a Gigantomachy. In rendering of hair, form of head, and treatment of the nude, it might, so far as I can judge from a photograph, have formed part of our frieze. Robert's dating is the early second century, but in this he seems to be influenced by a wish to class it with the Vatican sarcophagus, which he considers post-Pergamene. I see no reason why both the Wörlitz fragment and our relief should not be attributed to the pre-Pergamene period, or at the latest to the time of the first Pergamene school.

If I am correct in this conclusion, the Corinthian relief will be of interest not only as one more original Greek work of the Hellenistic period, but as the first known case in which the serpent-footed giants are used in sculpture.

III. ROMAN SCULPTURE

Of original Greek work Corinth has no more at present to offer. From the Roman period we find here, as elsewhere, copies of Greek statues, decorative work, and portraits. The best work of this class discovered in previous years has been published by Mr. Richardson and Mr. Tucker.² Among the finds of 1907 and 1908 there are several worthy of mention.

The class of Roman copies from Greek originals is represented by two important examples.

1. (Figs. 14, 15.) A life-size statue of Artemis, found in two pieces:
(a) Inventory No. 812, found June 21, 1907, 1 m. north of the Byzantine

¹ *Antike Sarkophagreliefs*, III, 96.

² *A.J.A.* 1902, pp. 7 ff. and 422 ff.

foundation wall of St. John's. Plinth with feet and lower part of drapery. Plinth broken away from centre of front diagonally back to left foot, and thence to point where drapery touches it in rear; left foot lacks all the toes except the first.

(b) Inventory No. 820, found June 27, built into Roman wall continuing line of the "Boudroumi shops," at a depth of about 1.40 m. above virgin soil. Rest of torso, fitting directly the broken surface of *a*. Lacks head and neck, right arm from just below shoulder, left arm from point of



FIGURES 14, 15.—STATUE OF ARTEMIS AT CORINTH.

shoulder; a large piece flaked away from the back on left side. Marble of even, medium grain; takes yellowish patina. Surface on the whole well preserved; backs of folds chipped away in places; right shoulder found broken off, but has been replaced. The figure has the following traces where attributes have been broken away: on the right shoulder and on the left side just where girdle passes under fold, small square marble supports; on back, reaching diagonally from right shoulder to break, a scar, 0.175 m. long and 0.05 m. to 0.055 m. wide; on left side at level of girdle

near back a triangular scar 0.08 m. long, on same side, half-way down thigh, reaching diagonally across the folds of the *apoptygma* a scar 0.14 m. long, whence some long narrow object had been broken away; scar not continuous, showing that at one point folds were worked free under the object. Folds on the left side above the girdle worked flatter and in less detail than elsewhere. Finish careful; flesh-parts show polish, especially well preserved on feet; garments roughened by long, fine chisel marks.

The figure stands erect, weight firmly planted on the right foot, the left drawn well back. So far as can be judged from what remains of the neck-muscles, the head was turned a little toward the left. The costume is a Doric peplos with *apoptygma* girdled to form a *kolpos*; it falls on the right in long folds, and is drawn back over the free leg in quiet, unbroken curves. The fall of the stuff on the right side is less rich than usual, for instead of presenting two free edges with the accustomed serpentine curves, it is

sewn together, and hangs in the same straight, channeled lines as in front. The fall of the *apoptygma* over the breast is broken by a quiver-strap that passes over the right shoulder and under the left arm.

The position of the arms can be interpreted partly by the aid of the quiver-strap, partly by the marks of attachment. The right was bent at the elbow, bringing the hand to shoulder height, where the wrist was probably joined to the shoulder by the marble support, of which traces still remain. The goddess was just lifting her arm, ready to pull out an arrow from the quiver, whose existence is shown in the diagonal break on the back. The left arm was slightly bent at the elbow, and held some long object, doubtless a bow, which slanted back from the upper marble support by the girdle along the line of the break across the folds of the *apoptygma*.

The original statue occupies a place midway between two well-known types of the long-robed Artemis with bow and quiver. The first is represented by a statue in Holkham Hall,¹ which stands in the reverse attitude from our figure, weight on left leg and right drawn back. The right arm is raised higher than in our figure, and the hand has reached well back toward the quiver; the left arm carries a bow as ours would have done. The figure wears the Doric peplos, with *apoptygma* and *kolpos* held in by the diagonal quiver-strap, but unlike our Artemis is girded also over the *apoptygma*. The result is that the drapery instead of breaking in abrupt, naturalistic folds, falls in two more or less symmetrical systems from breast to belt, hardly disturbed by the passage of the quiver-strap. The effect is thus a certain deliberate, well-ordered stateliness, with lines which suggest those of the fifth-century Athenas. A variant of the type with an Ionic chiton under the peplos and no *kolpos* is found at Landsdowne house;² another, nearer our type, resting the weight on the right leg, but without the *kolpos*, is in the Vatican.³ Amelung places it in the fourth century, but my own inclination would be to date it in the late fifth century. The girding of the Doric peplos over the *apoptygma* and the resulting symmetry is distinctly a trait of the earlier, severer time.

¹ Reinach, *Répertoire*, Vol. I, p. 300, Clarac 1203 A.

² Reinach, *Répertoire*, Vol. I, p. 301, Clarac 1213 A.

³ See the Amelung catalogue, Braccio Nuovo 38.

The fourth-century translation of the same motive is found in a group of statues represented by the Dresden Artemis and a replica in Berlin (Catalogue No. 70). Here the goddess stands, as in the above-mentioned group, with the weight on the left foot and the right drawn back, raising the right hand to the quiver, and holding a bow in the left. The difference lies in the fact that the peplos has a deep *apoptygma* caught back only by the quiver-strap. It is thus thrown into long, carelessly graceful folds, which, instead of grouping themselves into neat systems conditioned by the rise and fall of the figure beneath, flow directly across it and find their continuation in the lines of the skirt. This apparent waywardness really reveals a different principle of arrangement; the garment has become of interest in itself as an independent part of the design. This type has been attributed to Praxiteles; it is certainly characteristic of his century.

The Corinth figure differs equally from the somewhat conventional stateliness of the first type, and the deliberately careless grace of the second. The *apoptygma* is ungirt at the waist, but the drapery has not the independent flow of the Dresden type; its function is still to enhance the lines of the figure. The general lines of the pose in its dignified amplitude suggest the caryatids of the Erechtheum or the Munich Eirene, and, were it not for the quiver-strap, the flow toward the right of the drapery below the breast would have been similar. But the artist seems to have laid the strap across and copied the resulting folds as they lay, a little spare and abrupt, with no trace of artificial arrangement. The same unpretending naturalism is seen in the rendering of the quiver-strap with its creased edge under the left breast, and in the careful reproduction of the seam on the right side, in which right and wrong side of the garment are painstakingly distinguished.

The traces of timidity and stiffness in the treatment would seem due to the experiment of the artist in placing the quiver-strap over the ungirt *apoptygma* and *kolpos*. The figure considered as a whole points to an origin in the period when the old stateliness was giving way to a greater freedom and spontaneity; that is, in the later years of the fifth century.

2. (Figs. 16, 17.) Torso of a satyr wearing *nebris*, inventory No. 765. Found April 22, 1907, north of St. John's, 7 m. east of the bridge, at a depth of 3 m. Found in three fragments: the torso proper, lacking head, arms from just below the shoulders, and legs from a little above the knees; and two small bits numbered 675 *a* and 675 *b*, consisting of the right knee and a piece of the right leg reaching from the break on the thigh to the middle of the knee-cap; also an unnumbered fragment of the lower end of the *nebris* from the right side. The contact surfaces are preserved, so that the fragments could be restored as indicated by the sketch. Length, including the fragment of knee, 0.775 m. Marble Pentelic, discolored, but surface fairly well preserved. Workmanship on the whole conscientious, but a little flaccid and characterless. Attempt to distinguish between the smooth, but not highly polished, flesh and the slightly roughened *nebris*; the roughening produced not by fine chisel lines, as in the case of the Artemis, but by leaving surface a little granular. Raw edge of the leather suggested by a series of little nicks cut along the bottom edge of the garment. Folds over breast worked flat, with slight detail; left side from thigh down very rough in finish; back modelled fully in round, but less careful in finish than front. Traces of square marble supports on right hip, and on drapery just below left arm-pit.



FIGURE 16.—TORSO OF YOUTHFUL SATYR AT CORINTH.



FIGURE 17.—TORSO OF SATYR, WITH FRAGMENTS ADDED.

The statue was evidently a copy of one of the variations of the Praxitelean satyr. The type is represented by a fairly numerous series of replicas, of which those in Berlin¹ and in the British Museum² are fair examples. It represented a young satyr leaning the left elbow on a support, with the weight on the right leg and the left crossed easily in front. The head and forearms in the Berlin copy (as well as in the Vatican and Albani examples) are restored,

¹ No. 261; Reinach, *Répertoire*, II, 136, 2.

² The Dionysus from Tralles; British Museum, 1626.

as is also the flute. In the British Museum copy, where the hands are original, they hold a bunch of grapes. But the general analogy of the type with the resting satyr of the Louvre,¹ of which it is a variant, makes the pipe the most probable accessory. In our figure the supports on the right hip and below the left arm-pit would have connected with the torso the right and left wrists respectively, and the pipe held between the two hands would have concealed the rather careless working of the folds of the *nebris*. To judge from the working of the left side, the support extended to about the level of the hip. Its form varied in the other replicas; in the Albani one it was a plain tree-trunk; in Berlin it was



FIGURE 18. — ROMAN
SUPPORT, CORINTH.

bored for a water-pipe and draped with a garment at the upper end, just below the edge of which was a small lion's mask, for discharging the water, while still lower a syrinx was carved hanging on a broken branch. The exact form it took in our instance cannot be determined.

Among the Roman decorative fragments, one, at least, deserves mention—inventory No. 810. It is a support in the form of a tree-trunk, around which twines a very realistically rendered grape-vine (Fig. 18). The modelling shows the close observation and love of all the nuances of form in the vegetable world that characterized the Roman art of Augustan days. The bark of the tree, split open near the base and curling back its scarred lips, the vine-stem with its rind torn in long parallel shreds, the yielding surface of the leaves, now blown back and clinging to the tree-trunk, now folding itself about the clusters of grapes, are not unworthy of the chisel that copied plane-tree-branches on the sides of the Ara Pacis or olive sprays on a certain little round altar in the Museo delle Terme; while the design shows in a cruder form that thoughtful balance of light and shade that makes the pilasters from the tombs of the Haterii² in the Lateran such masterpieces. It is in

¹ See for a discussion of this type and its replicas, Klein, *Praxiteles*, pp. 213 ff.

² Illustrated, Wickoff, *Roman Art*, pls. VII and VIII.

these decorative bits rather than in copies or in cult statues or even in portraiture that the Roman artist surprises us with touches of unlooked-for poetry. And in that heritage from "gli antichi," which did so much to mould Italian sculpture in its new manifestations, Roman love of the world of plant and flower had as true a share as Hellenic mastery of the human form.

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AN ALTARPIECE BY LUCA DELLA ROBBIA

IN the private chapel of the Palazzo Episcopale at Pescia there is an altarpiece of glazed terracotta, in form suggesting a triptych with rectangular panels (Fig. 1). In the central panel is represented the Madonna and Child, worshipped by angels; at the sides are S. Jacopo, in pilgrim's garb, holding a book and staff, and S. Biagio, in bishop's robes, carrying a book and his specific emblem, the iron carding comb. The figures are white against a blue ground, while the hair and the ornamental borders of the garments were once covered with gold, some traces of which still remain. The panels are surrounded by a band, the decoration of which consists of rosettes, alternately blue and green, circled in white against a green ground. At the base are arms, consisting of the symbol T and a shield divided diagonally into white and black halves. The cornice of the altarpiece is made up of classic mouldings, and the low predella is ornamented with polychromatic fruits and flowers. The outside measurements are 1.63 x 1.27 m.

Below the altarpiece is an inscription which informs us that in the year 1847 these "precious fragments, neglected for many years by those blind to art," were put together again through the munificence of Pietro Forti, Bishop Elect of Pescia, and Domenico Martini, acting Treasurer.¹ In this chapel the altarpiece has stood for more than half a century, almost unnoticed by those who concern themselves with the study of Italian art. I confess that I myself know it only from a photograph and observations taken at my direction by Mr. Henry H. Burton.

¹ The inscription reads: *Di preziosi frantumi che per incuria de' ciechi nell' arte giacquero negletti molti anni questo egregio lavoro di Luca della Robbia restituirono al debito onore di largizioni di Pietro Forti Vescovo designato di Pescia e le cure di Domenico Martini Economo alla sede vacante. 3 Aprile, 1847.*

What its history may be is a matter for conjecture. I am informed that in Pescia, on the Piazza Vittorio Emanuele, No. 61, there is a coat of arms consisting of a shield divided diagonally into white and black halves, against the black sur-



FIG. 1. — ALTARPIECE AT PESCIA.

face of which is a white T. According to the sub-economo of the Cathedral of Pescia the coat of arms is that of a Convento dei Templari, which formerly existed on the Piazza Vittorio Emanuele and was known as S. Rocco. Of a church or chapel

by this name I am unable to find other notice, as also of a foundation of the Templars at Pescia. The badge of the Templars was a red cross upon a white mantle,¹ whereas on our coat of arms the T is white.

The Marchesa Burlamacchi² states that this altarpiece was formerly in the Church of S. Pietro and that in the year 1784 it was saved from a fire and transferred to the chapel of the Palazzo Episcopale. The latter statement seems improbable, unless supplemented by the information recorded on the tablet beneath the altarpiece, that, after having been neglected for many years, it was finally set up in the year 1847. But the hint that it was formerly in the Church of S. Pietro invites further investigation. To the south of the Piazza Grande, in Pescia, there is a small church or oratory known as the Oratorio di SS. Pietro e Paolo, popularly called the Madonna di piè di Piazza. Its façade seems to have been inspired by that of the Pazzi Chapel in Florence. On account of this resemblance this oratory was formerly ascribed to Brunelleschi.³ This attribution was denied by Gaye,⁴ who believed that the church was built by Andrea di Lazzaro di Cavalcanti, who was born in the neighboring village of Buggiano, and became the adopted son and pupil of Brunelleschi. This attribution is accepted by Laspeyres,⁵ Mothes,⁶ Burckhardt,⁷ and Cornel von Fabriczy.⁸

It will be remembered that between the years 1432 and 1440 Cavalcanti made two attractive *lavabos* for the two sacristies of the Cathedral of Florence;⁹ that about this period Luca della Robbia was occupied in making a beautiful choir gallery,

¹ Century Dictionary, s.v. Templar.

² *Luca della Robbia*, p. 71. London, 1900.

³ Moreni, note to Baldinucci, *Vita di Filippo di Ser Brunellesco*, p. 99. Florence, 1812. This attribution is still admitted by the author of the *Guide Joanne, Italie du Centre*, p. 228. Paris, 1891.

⁴ *Carteggio inedito d'artisti dei secoli XIV, XV, XVI*, Vol. I, p. 143. Florence, 1839.

⁵ *Die Kirchen der Renaissance in Mittelitalien*, p. 13, Taf. XIX, Fig. 58. Stuttgart, 1882.

⁶ *Die Baukunst des Mittelalters in Italien*, p. 789. Jena, 1883.

⁷ *Geschichte der Renaissance in Italien*, 3te Auflage, p. 52. Stuttgart, 1891.

⁸ *Filippo Brunelleschi*, p. 234, note 1. Stuttgart, 1892.

⁹ Gaye, *Carteggio*, I, p. 143; Geymüller, *Die Architektur der Renaissance in Toscana*, I, p. 62. Munich, 1885-1893.

lunettes, and bronze doors for these same sacristies; that the design of Luca della Robbia's marble tabernacle at Peretola (1441-1442) is in the same spirit as Cavalcanti's *lavabos*; and that in 1443 Luca della Robbia was the chief decorator of Brunelleschi's Pazzi Chapel. What is more natural than that Cavalcanti, in establishing in Pescia a reminder of the Pazzi Chapel, should wish that it might contain an example of the work of its distinguished decorator?

The Madonna di piè di Piazza, however, is a very small chapel and not likely to have had more than a single altarpiece. This was described in 1784—the very year given by Madame Burlamacchi as the date of the fire—as an image of the Virgin, surrounded by paintings of God the Father and many angels, two of whom apparently support the image, the work of Alessandro Turiani of Bologna.¹

There are two other churches in the neighborhood bearing the name S. Pietro, to one of which Madame Burlamacchi may refer. One is the Pieve at Borgo a Buggiano, enlarged in 1773, and adorned with paintings of the Florentine School.² This was the town in which Cavalcanti was born, and the altarpiece may have reached it through his influence. Then there is the Pieve of S. Pietro in Campo, the patronage of which was presented in 1472 by Pope Sixtus IV to the Marchese Capponi of Florence, who in turn paid a rental for the support of the Bishopric of Pescia.³

A final hypothesis is suggested by the subjects of the altarpiece. The Madonna is the patron of the Cathedral of Pescia, S. Biagio of a small oratory, and S. Jacopo of more than one of the dependencies of the Cathedral of Pescia. The church which seems most likely to have received an altarpiece from a Florentine patron is the Church of S. Jacopo at Altopascio. At Altopascio⁴ was the home of the Ospitalieri, which order of philanthropic knights spread throughout Italy and the rest of Europe. From 1446 to 1472 Florence contributed four of the

¹ *Istoria della città di Pescia e della Valdinievole, scritta da P. O. B.*, p. 306. Pescia, 1784.

² Repetti, *Dizionario geografico fisico storico della Toscana*, I, p. 338. Florence, 1838-1846.

³ Repetti, *op. cit.*, I, p. 429.

⁴ Repetti, *op. cit.*, I, pp. 76-77.

distinguished Capponi family to its membership, and in 1472 Altopascio, as well as S. Pietro in Campo, fell under the patronage of the Capponi family. We have no basis for believing that our altarpiece was presented by any member of this family, but it is clear that it was given by some one connected with the Ospitalieri, or at least to some church under the patronage of that order, for the coat of arms on the predella is the badge of the Ospitalieri of Altopascio, a *white T* (not the letter T, but a *crux commissa* or *tau-cross*) worn on a cloak or tunic of gray or brown.¹

But though the history of the altarpiece may still be obscure, its attribution is more certain than is usually supposed. Cavallucci and Molinier² timidly ascribe it to the atelier of Andrea della Robbia; the Marchesa Burlamacchi³ mentions it in a chapter entitled "Doubtful Works in Various Towns of Italy," and remarks "it has been mentioned as Luca's"; and Miss Cruttwell⁴ catalogues it without further mention with the works of the atelier. In my opinion the local authorities in 1847 were right—more so than perhaps they realized—in accrediting the altarpiece to the Master of the Robbia School. The seated Madonna with the adoring angels recalls at once the composition repeated in every panel of the bronze Sacristy doors; the S. Jacopo may be recognized as Luca's from the close resemblance in many details to the S. Jacopo, and other apostles, in the medallions of the Pazzi Chapel; and the S. Biagio is not far removed in type from S. Agostino of the Tabernacle of the Holy Cross at Impruneta. Even the frame, in its general conception, is closer to Luca's beautiful mosaic frame for his tomb of the Bishop Federighi, than to the more architectural frames adopted by Andrea della Robbia and his followers.

Its date is not so easily determined. In most of its details it suggests works by Luca della Robbia which date before 1450, but the posing of the Christ Child upon a cushion, a motive which caught the fancy of Andrea della Robbia, makes it probable that the altarpiece dates from a few years later —

¹ *Istoria della città di Pescia*, p. 212.

² *Les della Robbia*, p. 242. Paris, 1884.

³ *Op. cit.*, p. 71.

⁴ *Luca and Andrea della Robbia*, p. 351. London, 1902.

possibly as late as 1472, when the Capponi family assumed the patronage of Altopascio and the neighboring Pieve of S. Pietro in Campo.

In form its threefold rectangular divisions suggest the altarpiece of Andrea della Robbia in the church of S. Maria degli Angeli at Assisi, noted by Marcel Reymond¹ as "le premier exemple d'un retable en terre émaillée fait à l'image des grands retables des peintres et comprenant une série de tableaux." But a moment's comparison with the Assisi altarpiece will show that at Pescia we have an earlier monument, in which, although the details and forms are full of the spirit of the Renaissance, the general conception is not so far removed from that of a Gothic triptych.

We may, therefore, claim for Pescia the earliest glazed terracotta altarpiece of the Robbia School.

ALLAN MARQUAND.

PRINCETON UNIVERSITY,

May 9, 1909.

¹ *Les della Robbia*, p. 163. Florence, 1907.

THE PAJARITAN CULTURE

IN proposing the name which is now generally accepted for the plateau lying between the Jemez Mountains and the Rio Grande and extending from the Chama valley to Canada de Cochiti, the writer chose the central geographical feature of the area, *i.e.* the Pajarito canyon (Spanish *pajarito*, a little bird, a sparrow). The Tewa name, Tshirege (the place of the Bird people), is applied to a "cliff city" on the northern rim of this canyon, more extensive even than Puye, in which, as well as in the neighboring villages, I have made considerable excavations. These investigations made known a new region and a culture for which a more definite term than "Pueblo" or "Ancient Pueblo" or "Ancient Tewa" seems necessary. It will suffice for the moment to state the three principal reasons for withholding assent to the long-accepted dictum that the Tewa and other Pueblos are merely the descendants of the ancient cliff dwellers, and this point will be discussed at greater length further on in this paper. 1. There is general non-conformity between Tewa symbolism and Pajaritan symbolism. 2. There is non-conformity of physical type, the Pajaritans having been a homogeneous people of dolicocephalic type, while the Tewa, and all other Pueblos, are non-homogeneous, and predominantly brachycephalic. 3. Tewa tradition, when thoroughly sifted, does not support the hypothesis of identity. These facts have seemed to me of sufficient importance to warrant, pending the acquisition of further information, the tentative establishment of a culture which, from the community on which the type is based, I have named the Pajaritan.

The archaeological remains of this culture are scattered over almost the whole of the Pajarito plateau. There were three principal foci of population, the Puye, the Pajarito, and the

Rito de los Frijoles. The degree of ethnic relationship between these groups remains to be established, but certain common characteristics that persist throughout indicate relationship as close perhaps as that now existing between the Tewa villages of San Juan, Santa Clara, and San Ildefonso, though it does not necessarily follow that the same language was spoken in the three groups of settlements. These groups afford exceptional facilities for the study of the development of culture through a long period of time. The geographical isolation was such as to induce definite, homogeneous development. That this isolation was well preserved is shown in the homogeneity of both the physical type and the cultural remains. In the art of the Pajaritans we may read several centuries of their history. It is entirely pre-Spanish, the excavations having never yet yielded a vestige of European influence, and so distinctly does it reflect the civilization in which it was produced that a specimen of pottery from this region is as unmistakable to the trained eye as is anything Greek, Etruscan, or Egyptian.

It would seem that some ancient culture wave, traversing the Rio Grande valley in very remote times, must have thrown off detachments which lodged upon this plateau. The cause of the unique localization of these bands is not at first thought clear. It is unlikely that motives of defence directed the choice, as would at first seem obvious, for much evidence tends to show that the modern predatory tribes, Navaho, Apache, and Ute, arrived in the Southwest in comparatively recent times. As I have shown in a previous paper,¹ the construction of the great defensive community houses of the Pajaritans belongs to the latest epoch of their history. For a long period they were dispersed over the plateau. This was the epoch of the "small houses," of which several thousand have been counted in this region. As I have shown in a previous paper,² there is both archaeological and physiographic evidence that the earliest inhabitants of this region arrived at a time when climatic conditions were radically different from those of the present. The proof of slow, progressive desiccation of the Southwest is

¹ Archaeology of Pajarito Plateau, New Mexico; *American Anthropologist*, October-December, 1904.

² *Les Communautés Anciennes dans le Desert Américain*, Chapter III.

abundant. The Pajarito plateau has lain uninhabited for ages because of the almost total absence of water. The great communities, representing the last stages of habitation, clustered about the gradually failing springs. The earlier "small house" communities were found everywhere, indicating a general climatic condition favorable to agriculture. It would thus appear that the reason for selection of this plateau as a place of residence by those early bands that first settled here was simply that in those times this now desiccated table-land afforded more favorable conditions for subsistence than did the adjacent valley of the Rio Grande; a condition now reversed. This diffusion of population would seem to imply a social organization different from that existing among the people of the great community houses where the system was the prototype of the modern Pueblo. Such, however, is not the case. In the dispersed "small house" communities there were fully developed the basic principles of tribal structure that govern in Pueblo organization to-day. There was lacking only the element of dual organization, a social phenomenon that attended the coming together of numerous clans into great communities. This fact of genetic aggregation persists among the Pueblos to-day. In the "small house" communities the groupal unit was the clan. The basic social fact was the matriarchal system, by virtue of which all domestic authority resided in the mother. The fundamental fact of the religious order in the modern Pueblos is the dual hierarchy, by virtue of which the sacerdotal authority is lodged in two priests, the *Summer cacique* and the *Winter cacique*, who have charge of the ceremonials of their respective seasons. This developed along with the movement toward close community aggregation. But that the basic elements of it existed in the "small house" communities is disclosed in the house remains. The structural germ of every community house was the *kiva*, the circular subterranean room that is found in conjunction with all the community houses, small and great, of the Rio Grande and the San Juan valleys. This was the clan sanctuary, the place set aside, before the first stone of the dwelling was laid, for prayer and religious ceremony.

No other single object in southwestern archaeology is of

greater interest than these subterranean sanctuaries. Everywhere we find the kiva as the nucleus of the settlement. In southeastern Utah, especially in the Montezuma canyon, the circular underground kiva is conspicuous in connection with every ruin group even though it may consist of only two or three rooms. The evidences that we have accumulated in Utah, Colorado, and New Mexico during the last two seasons point to the kiva as the germ of every pueblo community. It seems that the first act of the clan was to locate its sanctuary and around it extend its living rooms. In the small community houses scattered all over the Pajarito plateau we find, as in southern Utah, first of all the kiva. With the formation of the great communities it would seem that a new feature of tribal organization developed, namely, that of the dual hierarchy, and with this came the dual kiva system, the common sanctuary for each division of the tribe, the essential point around which the settlement could grow. In it was centred all that was vital to the life and happiness of the people. It was the place of silence, the sanctuary to which those charged with the sacerdotal functions of the clan retired for thought, for prayer, for offering, for sacrifice. It was the place for the performance of secret religious rites and preparation for public ceremonials. In gathering about the Sipapu, men again approached the Earth Mother, they sought the channels of ancient wisdom, they were at the portal whence life itself emerged. I quote here from the sayings of Pueblo priests of to-day, according to whom it is not quite correct to speak of the Sipapu as symbolizing the entrance to the underworld. In the kiva of the Rio Grande clans and the observances clustering about it, we have symbolized the Pueblo conception of human birth, the origin of life, and the ordering of human conduct.

In Pueblo organization to-day, the clan kiva has almost disappeared. It still remains at Taos, but at San Juan, Santa Clara, San Ildefonso, Nambe, and Cochiti only tribal kivas remain. There is the kiva of the *Summer people* and the kiva of the *Winter people*. In some cases one of these is subterranean or semi-subterranean, the other wholly above ground. The religious functions of the tribe are, as above stated, in the hands of two priests, the Summer cacique and the Winter

cacique. Each one has charge of the ceremonials pertaining to his season, and each one officiates in the sanctuary pertaining to that division. The history and meaning of this dual organization are not yet fully known.

In connection with the uses of the kiva among the Pueblos, it is interesting to note the following parallel in Pawnee ritual. I quote freely from Miss Alice C. Fletcher's study of the Hako.¹

"The first stanza of the second part calls the people to give heed to Ku-sha-ru, a place set apart for sacred purposes. Concerning Ku-sha-ru, the old priest said: 'The first act of man must be to set apart a place that can be made holy and be consecrated to Ti-ra-wa, a place where a man can be quiet and think about the mighty unseen power.'"

It will be remembered that the first stanza of the first part made mention of A-wa-hok-shu, the holy place, the abode of Ti-ra-wa, whence life was given to man through the intermediary powers. The first stanza of the second part directs that man should set apart a holy place, where his thoughts could ascend to the life-giving Ti-ra-wa.

The old priest further explained: "We are taught that before a man can build a dwelling, he must select a place and make it sacred, and then about that consecrated spot he can erect a dwelling where his family can live peacefully. Ku-sha-ru represents the place where a man can seek the powers and where the powers can come near to him."

There is to be noted here a most significant similarity between the Pueblo kiva as the essential nucleus of a settlement and the "sacred place" of the Pawnee.

The arts of the people of the plateau were those of practically all the ancient sedentary tribes of the Southwest. Their highest attainment was in pottery-making, and in this their only unusual achievement was in the use of glazing in ornamentation. That they had discovered the art of glazing and were using it with fine effect in decoration cannot be questioned. In the greater part of the beautiful red and brown ware found at Puye, Otowi, and Tyuonyi the black lines were covered with a vitreous coating which chemical analysis proves to be a true glaze.

¹ *Rep. Bur. Amer. Ethnol.* XXII, 2, p. 33, and pp. 284-285.

It has been used solely for decorative effects, and while usually applied over black lines, giving the peculiar under-glaze effect, the material has, doubtless intentionally, been caused to spread over large areas, producing striking effects, especially when by reason of iron in the clay, rich iridescent hues have occurred. But one specimen has been found, a small prayer meal bowl at Puye, in which an entire surface of the vessel is covered with the glaze.

The process of glazing as practised by the Pajaritans was very simple. After the vessel had been decorated and fired in the usual manner, a saturated solution of salt water was laid on over the ornament and the vessel again fired under as great a degree of heat as they were able to produce in their primitive kiln. The soda of the solution combining with the silica of the clay produced over the design, and over all surfaces on which the solution might have been spread, a true transparent glaze which could never scale or peel off without taking with it the clay of the vessel itself to the full depth to which the salt water had penetrated. As above noted, the spreading of the solution and the occurrence of oxides in the clay produced beautiful accidental effects, particularly the rich iridescent tints found on the pottery at Puye and Tyuonyi.

Glazing was practised to some extent in the valley of the Little Colorado, but the art was probably carried there in the course of migrations from the Rio Grande drainage. It is of quite an inferior order. In fact, nowhere else on the American continent was the art of glazing so well understood as in this region. It was long held, and may still be held by some American archaeologists, that the art of glazing was not indigenous to America and that wherever found it is an indication of European influence. In fact, by some it has been called the "Spanish glaze." We have shown the contrary to be true. It was practised on the plateau west of the Rio Grande for centuries prior to the advent of the Spaniards, and ceased to be practised during the upheaval that occurred with the coming of the conquerors. The art is unknown to the modern Pueblos, is never seen in the specimens of archaic pottery, sacred vessels, and heirlooms that have been handed down among them for many generations, and is not to be found in the refuse heap of

their villages which go back over almost the entire historical period. On the other hand, it occurs profusely in all the ruins on the western plateau, where no vestige of European influence has ever been found — sites which if occupied at the time of the conquest could not have escaped mention in the ecclesiastical records. It may then be safely affirmed that decorative glazing was an indigenous American art, and I should be inclined to consider the plateaus of the Rio Grande drainage as the place of its origin.

As stated at the beginning of this paper, it cannot be said that the ancient people of Pajarito plateau were the immediate ancestors of the tribes living now in the Rio Grande valley. That there was relationship is not questioned, but the degree of relationship is yet to be determined. It is the theory of absolute identity that is not entirely accepted. This general theory concerning the ancestry of the Pueblos was first announced by no less authority than Major Powell and for many years was accepted as conclusive. It was based upon facts of similarity in culture and upon the statements of the living Indians. My reasons for the rejection of this theory were stated briefly at the beginning of this paper and will here be touched upon again. First, the symbols with which the ancient people of Pajarito decorated their pottery were entirely different from those of the Pueblos of the present day. This fact was pointed out by me and supported by a large series of illustrations in a paper read before Section H of the American Association for the Advancement of Science at Washington in 1902. The system of symbolism of the Pajaritans is dominated by one definite idea. The prevailing motive throughout all their decoration was that of the Awanyu. It is the emblem of a mythic power. Awanyu was the preserver of water, the guardian of springs and streams, the preserver of life; for without water, crops, food, life, must fail. The history of the last epoch of the occupation of this plateau, and this is the epoch of highest development in art, social organization, and religious life, is a history of unceasing struggle against failing nature. Subsistence became constantly more and more uncertain, life more and more precarious. It was just the condition necessary to the development of ritual and the elaboration of symbolism.

So we find everywhere the one idea projected in symbolic ornamentation upon the food bowls and water-jars; Awanyu, emblem of mythic power, represented by the great prayer plumes, or the circuit in which the power habitually moved, or the great band across the concavity of the vessel—the Sky-Path of the mighty power. In Tewa tradition there is the belief that the disappearance of the Pajaritan people was due to their loss of favor with Awanyu, after which he “threw himself across the sky.” The origin of the Milky Way is thus accounted for.

The ancient cycle of Pajaritan mythology is entirely broken down, and the merest fragments can be recovered from a few of the old men of the different villages. It has been submerged by the more vital mythology of a more recent epoch. The dominant religious symbol of the Pueblos of the present day, seen on all their prayer meal bowls and etched upon the rocks, is the plumed serpent called by them Awanyu, but never confused with the Awanyu of the ancients. It is a representative figure in reptilian form, furnished with plumes upon head and body, pictured as moving through the air and often drawn with great vigor. It is a symbol that is widely distributed over the American continent, and the being which it represents was doubtless one of the principal deities of the ancient Mexicans. Nowhere else has it been used on so magnificent a scale and with such remarkable effect as a decorative motive as upon the Aztec temple of Xochicalco near Cuernavaca in Mexico. In this connection a myth of the Tlauicas, a branch of the Aztec stock inhabiting the Cuernavaca valley, with reference to a mythic power, represented by them in serpent form and now seen in the Milky Way, is significant.

The most convincing testimony on the subject of the non-identity of the Pajaritans with the modern Pueblos is that of their physical characters. The skeletal remains that have been collected, in one case as many as 125 subjects from a single burial place, have been examined by Doctor Hrdlicka, and in a preliminary statement he pronounces the ancient Pajaritan people to have been of rather inferior muscular development and of the dolicocephalic type; moreover, a homogeneous people, unmixed in physical characteristics. On the same

authority modern Pueblos are predominantly a brachycephalic people. This nonconformity of physical type seems to destroy the hypothesis of identity between the ancient cliff-dwelling people of this region, whom I have called the Pajaritans, and the modern Pueblos.

As before stated, the evidence on which the hypothesis of identity was mainly based was the testimony of the Pueblo Indians themselves. For example, the Keres of Cochiti have always claimed the Rito de los Frijoles as one of their ancestral homes, and the Tewa of Santa Clara have in like manner laid claim to the ruined towns of Puye. The claim of the latter village was taken up for thorough examination. For over a quarter of a century these Indians have consistently claimed the cliff dwellings and community homes of Puye as the homes of their ancestors. During this period the Pueblo of Santa Clara has had pending in the courts a claim against the government of the United States for a large tract of land, about 90,000 acres, lying west of their grant and extending to the top of the Jemez mountain range. The basis of the claim was an alleged Spanish grant, and in support of such documentary proof as could be adduced, their ancient homes scattered over the plateau, particularly the Puye villages, were pointed out.

This tradition certainly came to be believed in good faith by the majority of the tribe. It was a stock argument in pointing out the injustice of the court in granting them a strip of less than 500 acres along Santa Clara Creek in lieu of the large tract claimed by them. This case was recently settled by the setting aside of the original claim and granting in lieu thereof a new reservation embracing something near half of the tract originally claimed. Since the favorable issue of their suit, the old men of Santa Clara are losing their fear that the admission of their exact relationship with the people of Puye will prejudice their claim. In a council held with their head men in August, 1907, to consider their opposition to my making excavations at Puye, what I believe to be the exact truth of the matter came out. They do not contend that their people, in their present organization as a village group, were the original builders of the cliff dwellings and community houses of Puye.

They hold consistently to the tradition of a reoccupation of the cliff houses and of some rooms in the great community house by the Santa Clara people during the troubled times of the Spanish invasion. It is possible that after the Pueblo rebellion of 1680, some Santa Clara families lived for a while in the cliff houses. This could have been but a temporary and limited occupation. The acculturation resulting from contact with European civilization could hardly have failed to manifest itself by that time in their utensils and in decorative motives. The excavations at Puye have as yet yielded no vestige of such influence. It is possible that the irrigating ditch along the south side of Puye arroya may belong to this late period. It seems likely that searching investigation of the Pueblo claims with reference to ancient sites will usually result as this case does.

It is certainly true that some clans in almost every modern Pueblo village trace their origin to the people of the cliffs in a perfectly consistent line, and this would account for the dolicocephalic strain found among all the Pueblos of the Southwest. They are uniformly a composite stock, formed doubtless by the amalgamation of people from the cliffs with incoming bands from outlying regions.

It is not to be supposed that the disappearance of this plateau population was due to any event of catastrophic character. Certain evidences of seismic activity have been observed in this region, but there is nothing to indicate that the dispersion of the people was due to earthquake shocks; nothing to indicate any general, sudden exodus, but rather a gradual abandonment of the towns, as the springs and streams dried up and the sites became untenable and the farms untillable because of the failure of the water supply. We have as yet no means of knowing to what distance the detachments that migrated from time to time from this plateau may have wandered. We find remnants of them at Hopi and in the villages of the Rio Grande valley, but these small bands do not account for the large numbers that must have at one time occupied the Pajarito Plateau. Among the people nearest in physical type to those whom we have called the Pajaritans are the Tarahumaras, a forest people living along the crest of the Sierra Madre and in the barrancas of the Pacific slope in Southern Chihuahua and Sinaloa. Also

among the California tribes are found those who conform rather closely in physical type to the ancient cliff dwellers of the Pajarito. The Pawnees are of like type but a greater stature—a difference that might readily come about with a radical change of habitat and mode of life.

EDGAR L. HEWETT.

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

WILLIAM N. BATES, *Editor*
220, St. Mark's Square, Philadelphia, Pa.

GÉNÉRAL AND MISCELLANEOUS

THE ARCHAEOLOGICAL CONGRESS IN CAIRO. — In *Kunstchr.* XX, 1909, cols. 419-425, M. MAAS gives an account of the recent archaeological congress in Cairo. For two days the meetings were held in Alexandria. Abbé Dusquèsne read an important paper on the sanctuaries at Aboukir. Theodor Schreiber showed that there really was an Alexandrian art with features of its own. H. Thiersch showed that the pharos built by Sostratus under Ptolemy Philadelphus in 280-279 B.C. stood on the site of Fort Kait and that from it developed the Egyptian minaret. He also gave a summary of the work done by his father and himself at the Serapeum in 1900-02. The director of the museum at Alexandria showed that the mania for garlands on the part of the ancient Alexandrians had no religious significance, but was simply due to sentiment. G. Steindorff discussed the excavations at the pyramid of Chephren. P. Cavvadias spoke on his excavations at Masakarata, Cephallonia, where he has recently opened twelve tombs with forty-seven graves intact. Mycenaean sherds, dating from the fifteenth to the twelfth century, B.C., were found, together with good vases of local manufacture, objects of gold, bronze, and glass. A. H. Smith discussed fragments of the column of the Treasury of Atreus, now in the British Museum. Pierre Paris denied the early connection of Egypt and Spain, showing that the supposed evidence for such connection was a modern forgery. G. Karo argued that the Mycenaeans got their idea of inlaid

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor BATES, Editor-in-charge, assisted by Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Mr. L. D. CASKEY, Miss EDITH H. HALL, Mr. HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor FRANK G. MOORE, Professor CHARLES R. MOREY, Miss M. L. NICHOLS, Professor LEWIS B. PATON, Professor A. S. PEASE, Professor S. B. PLATNER, Professor JOHN C. ROLFE, Dr. N. P. VLACHOS, and the Editors, especially Professor MARQUAND.

No attempt is made to include in this number of the JOURNAL material published after July 1, 1909.

For an explanation of the abbreviations, see pp. 123, 124.

weapons from the Egyptians. A. J. Reinach argued that the sarcophagus of Hagia Triada shows Mycenaean-Egyptian connections. B. Sauer showed that the newly found Niobid in Rome is to be connected with the sculptures of the Theseum and with the Athena from Pergamon in Berlin, and argued that Lycius of Eleutherae, a pupil of Myron, may be the author. V. Staes discussed a votive relief in Athens illustrating the story of Ion, but differing from the version of Euripides. I. N. Svoronos argued that the well-known figures of the boy with the goose and the boy removing a thorn from his foot were intended as representations of the sons of Asclepius. E. von Stern showed that the Ionians of Naucratis had commercial dealings with Olbia as early as the seventh century B.C. The bronze and silver work of Alexandria had an important influence on southern Russia. Pharmakowski reported upon his excavations at Olbia. In the Byzantine section Charles Diehl read two important papers. He showed in one that there was an important Egyptian element in Byzantine art; and in the other that the Byzantine material in the tomb of Charlemagne dates from the second half of the tenth century, and that it was put into the tomb when it was opened by Otto in the year 1000. Spiridion Lambros told of his preliminary work for an *Iconography* of Byzantine emperors.

NECROLOGY.—**Frank Calvert.**—Frank Calvert, American consul at Thymbra on the Dardanelles, died August 12, 1908. He was much interested in the archaeology of the Troad, and published several articles on Trojan topography. (*Z. Eth.* XL, 1908, p. 922.)

Georg Kawerau.—Georg Kawerau died April 13, 1909, at the age of fifty-two. He was an architect who did important work in the excavations at Miletus and at Didyma, as well as on the citadel of Pergamon. (*Arch. Anz.* 1909, cols. 73-74.)

Abraham Leissauer.—Abraham Leissauer died September 30, 1908, at the age of seventy-six years. As a physician, he interested himself in sanitary legislation, investigation of water impurities, etc., but prehistoric and anthropological studies took up a large part of his time in later life. His chief archaeological work is *Altertümer der Bronzezeit der Provinz Westpreussen und der angrenzenden Länder*, published in 1891. (*Z. Eth.* XL, 1908, p. 922.)

August Mau.—On the 6th of March, 1909, August Mau died at Rome, three days after the death of his wife. He was born at Kiel in 1840, and while still a young man suffered so severely from pulmonary disease that his life was despaired of. But by living in Italy, at Rome and Naples (Pompeii), he prolonged his life many years. From 1873 he was connected with the German Archaeological Institute at Rome. His chief work was in connection with Pompeii, which he knew more intimately than any other man except, perhaps, Fiorelli. To Mau is due the recognition of the four successive styles of Pompeian wall-paintings. His edition of Overbeck's *Pompeii* and his *Pompeii, its Life and Art*, are known by all classical archaeologists. The two volumes of his *Katalog der Bibliothek des Kaiserlich deutschen archaologischen Instituts in Rom* constitute a most valuable bibliography of archaeological literature, and his numerous articles, chiefly in the *Röm. Mitt.*, are distinguished by sound scholarship and learning. He was a man of great industry and equally great modesty, who took no pains to impress his merits upon the world, but whose death is felt as a great loss by all classical

archaeologists. (S. R., *R. Arch.* XIII, 1909, p. 262. Many other notices have been published.)

Selah Merrill.—On January 22, 1909, Dr. Selah Merrill died at Fruitvale, California. He was born in 1837 at Canton Centre, Connecticut, and entered Yale University with the class of 1863, but left before graduation to enter the New Haven Theological Seminary. In 1874 he was appointed archaeologist of the American Palestine Exploration Society, a position which he resigned to become Professor of Hebrew at the Andover Theological Seminary. He served as United States consul at Jerusalem from 1882 to 1886 and from 1891 to 1894, and was appointed for the third time in 1898. While at Andover, he established the Biblical and Oriental Museum. He was an authority on the Holy Land and published many books and articles upon it. (*Boston Herald*, January 24, 1909.)

Victor Récsey.—The death is announced of Dr. Victor Récsey, one of the best-known archaeologists in Hungary. He was born in 1858 at Nagyszombat, entered the Benedictine order, and became professor in 1884 at Sopron. In 1894 he became director of the library of the monastery of Pannonhalma. Among his works are *L'Ancien nom de Sopron et les inscriptions romaines dans le comitat de Sopron*; *Les manuscrits et les incunables de la bibliothèque épiscopale de Kassa*; *Les restes de l'église Saint-Laurent à Esztergom*; *Fouilles dans la région du lac Balaton*; *Les vestiges des communes romaines de Pannonie à Esztergom*; *Les inscriptions des anciens héros magyars, dans les catacombes romaines*. (*Polybiblion*, 1908, pp. 466-467.)

Ernst aus'm Weerth.—Professor Ernst aus'm Weerth, for many years director of the Rhenish Provincial Museum, has died at Bonn in his eightieth year. He was the author of *Bad der römischen Villa bei Allenz, Mosaikhoden von St. Gereon zu Köln*, and *Wandmalereien des christlichen Mittelalters zu Köln*. (*Athen*, April 17, 1909, p. 473.)

SERVIA.—**Excavations at Vinča in 1908.**—In *R. Arch.* XIII, 1909, pp. 213-215 (pl.), MILOJE M. VASSITS describes and discusses discoveries made in 1908 at Vinča, on the right bank of the Danube, about 15 km. below Belgrade (abbreviated by S. Reinach). Stone utensils, rude statuettes of terra-cotta (among them the first male terra-cotta statuette found in Servia), fragments of bone, obsidian, and other materials were found. Pottery of various kinds came to light, much of it ornamented with geometric designs. The anthropomorphic vases of the lowest stratum are contemporary with Troy II. This stratum owes its existence to a wave of civilization coming from the southeast. The upper strata at Vinča are contemporary with the seventh city at Troy. The prehistoric sites in Servia are briefly classified, and Vinča is placed in the earliest group.

VACATION COURSES IN ARCHAEOLOGY FOR TEACHERS IN GERMANY.—Although the usual spring courses for teachers in Rome and Bavaria were omitted in 1908, four other meetings were held with great success. At Berlin, April 23-30, lectures were given at the Royal Museums, to twenty-eight hearers, by Erman, Delitzsch, E. Meyer, H. Schmidt, Zahn, Trendelenburg, Winnefeld, and Puchstein, each on his special subject. On April 9-11, with 150 in attendance, lectures were given at the University at Münster on archaeological and literary subjects, by Cauer, Sonnenburg, Radermacher, Streitberg, and Kroll, and a visit was made to the excavations and museum at Haltern. In the Bonn-Treves

course at Whitsuntide, forty-one hearers attended lectures by Loeschcke on all periods of ancient art, and visited, under guidance, the Provincial Museum at Bonn, the antiquities at Treves, and a portion of the Roman *limes*. At Dresden, where ancient alternates yearly with renaissance and modern art, lectures were given to twenty-one teachers, April 12-25, by Studniczka, Treu, and Herrmann. (*Arch. Anz.* 1908, cols. 445-447.)

EGYPT

GERMAN EXCAVATIONS IN 1908.—In *Klio*, IX, 1909, pp. 124-131, L. BORCHARDT reports upon the excavations of German archaeologists in Egypt in 1908. At **Elephantine** the search for papyri was not especially successful. A few small Aramaic fragments were found, also some hieratic papyri in poor condition, and a considerable number in Greek of the second century A.D. The site of the temple of Jahwe, which was probably built of mud brick, has not yet been discovered. The foundations of part of the town wall and of several buildings south and west of the gateway of Alexander II, connected with the temple of Khnum, were uncovered. At **Kom Ombo** many Ptolemaic graves, most of which had been plundered, were opened in the cemetery 2 km. east of the temple. There were also found a number of tombs of the Middle Kingdom, one of which, that of a certain Sebekhotep, was adorned with paintings. At **Abusir** the mortuary temple of King Sahura of the fifth dynasty was excavated and a great quantity of reliefs found. There are representations of the king slaying Libyans, of ships returning from a successful expedition, of hunting scenes, etc.

GREEK AND LATIN INSCRIPTIONS.—In *C. R. Acad. Insc.* 1909, pp. 144-165, SEYMOUR DE RICCI publishes thirteen Greek inscriptions from Egypt, including a late Christian inscription from Nubia, dated November 27, 1181 (see p. 376), some of which had been incorrectly published before; also two Latin inscriptions. He adds a list of the seventeen Coptic manuscripts recently found near Edfu.

LETTERS FROM EGYPT.—In *C. R. Acad. Insc.* 1908, pp. 791-804 (4 figs.), there are printed three letters from Egypt by SEYMOUR DE RICCI. He gives the text of nine unpublished Greek and Latin inscriptions, and one Carian inscription, the seventh known, which has been purchased for the Louvre. Brief mention is made of two recent acquisitions of the museum at Alexandria, a much-broken seated female figure, and the torso of a Nike, both of excellent workmanship. Various antiquities for sale by Egyptian dealers, manuscripts, papyri, funerary portraits, etc., of more or less archaeological value are also recorded.

MEMPHIS.—Recent Excavations.—Professor Flinders Petrie, in a lecture at University College, London, May 20, 1909, gave an interesting account of his work at Memphis and Thebes during the past season. The chief discovery at Memphis was the palace of King Apries,—the Pharaoh Hophra of the Bible,—who was contemporary with Jeremiah. This palace was of impressive scale, about 400 feet long and half as wide. The middle court was over 100 feet square, with painted stone columns over 40 feet high. A still larger court extended on the north side, in which lie capitals of columns which must have been about 50 feet high. The approach to the palace led up through a large mass of buildings, to a platform at a height

of about 60 feet above the plain. The roofing of the halls was by cedar beams. Pieces of these were found, one of them with an inscription carved on it. Among the ruins were also discovered a large number of scales and plates of iron and bronze, which originally belonged to scale armor. The scales are sometimes quite thin, under half an inch long, sometimes stout-ribbed plates two inches long. Some good bronze figures of gods and sacred animals were also unearthed. But what gives an idea of the magnificence of the palace is a fitting of a palanquin, of solid silver, a pound in weight, decorated with the bust of the goddess Hathor. The workmanship is of great beauty, though the object was merely an attachment for a strap to a wooden beam. It was found buried in a hole in the floor of a hall used for a workshop. As this is a unique specimen, it will remain in the Cairo museum. In several places traces of still older buildings than the Apries palace were brought to light, such as the ruins of a large gateway of the twelfth dynasty. This was 20 feet high, and the greater part of six scenes which decorated it can still be put together. The sculpture is in low relief of much delicacy. The temple of King Proteus, Merenptah, which was discovered last year, has been partly cleared. It appears that, according to his usual habit, the king took his building materials from older works. Thus the capitals of columns found here are apparently of the fifth dynasty, like those seen in reliefs of that period. (*Nation*, June 10, 1909, pp. 590-591.)

THEADELPHIA. — *The Right of Asylum.* — In *C. R. Acad. Insc.* 1908, pp. 772-782, G. LEFÉVRE publishes two stelae, bearing the same inscription, found at Batn-Herit, the ancient Theadelphia in the Arsinoite nome. They record the petition of the priests of the crocodile god Pnepheros to Berenice IV to confer upon their temple the right of asylum, and the granting of the petition. The limits of the asylum are carefully stated, and must have extended far beyond the boundaries of the precinct. The petition is dated October 23, 57 B.C., and it was granted March 8, 56 B.C. Excavations are to be carried on at Batn-Herit by the Egyptian government, under the supervision of M. Lefévre.

THEBES. — *Recent Discoveries.* — Before Memphis was dry enough to work the past season, two months were spent by Professor Flinders Petrie at Thebes, where the ruins on top of the mountain were explored. They were found to be a chapel for the apotheosis of King Sankh-ka-ra, of the eleventh dynasty; it contained the pieces of the cenotaph and the Osiris statue of the king. Two of the desert valleys were exhaustively searched for concealed burials, and one untouched group was found. The coffin was covered only by about a foot of earth and stones. Around it were offerings of furniture, food, vases, and personal ornaments. On the mummy were a gold collar of four rows of rings, four gold bangles, earrings, and a girdle of electrum. This is one of the most complete burials known. Other interesting discoveries at Thebes were the clearing of a new temple site, two fine stone figures, and an untouched burial of the twenty-fifth dynasty. (*Nation*, June 10, 1909, p. 591.)

SYRIA AND PALESTINE

BEERSHEBA. — *A Fragment of a Byzantine Edict.* — In *R. Bibl.* XVI, 1909, pp. 89-106 (pl.; 3 figs.), F. M. ABEL describes an inscription discovered at Beersheba and purchased by B. W. Robinson of the American

School of Oriental Research. The first five lines are badly preserved, and seem to contain an extract from an imperial edict. The sixth and seventh lines describe the carrying out of the decree. The protocols of the Code of Justinian offer the nearest parallels to this text.

DAMASCUS.—**Two Unpublished Palmyrene Inscriptions.**—In *J.A.O.S.* XXIX, 1908, p. 203, H. H. SPOER publishes two Palmyrene inscriptions now in the possession of a gentleman at Damascus.

GEZER.—**Report on the Excavations.**—In *Pal. Ex. Fund.*, XLI, 1909, pp. 13–25 (7 figs.), R. A. S. MACALISTER describes the results of the excavations at Gezer from August 11 to November 10, 1908 (see *A.J.A.* XII, pp. 86–87, 357; XIII, p. 75). The joining of the two pits, that of the Central Valley and the Eastern Hill, is described. Another cave-cemetery has been found, with a low chamber measuring about 25 feet each way and about 7 feet high, containing the remains of four persons, but no remarkable small objects; the pottery belonged to the normal early Second Semitic types. The most interesting find is three specimens of a peculiar type of "Astarte-Plaque," showing a face with strongly marked, peculiar features, and wearing a veil, with embroidered border, which covers the head and falls over the shoulders, such as has not been previously found on plaques from Gezer (but compare with this the figure of a veiled goddess recently found at Tell Halaf and mentioned in *A.J.A.* XIII, p. 74). The figure shows a profusion of ornament and holds over the breast a circular object difficult to explain; a peculiar feature of the goddess is the presence of six fingers on each hand. Certain inscribed tablets were also found, one with lines in a pattern not explained, and a second bearing a Hebrew inscription, an interpretation of which is given, *ibid.* pp. 26–34 (2 figs.). Among the other finds are a good specimen of an ivory inlay; another Old-Hebrew jar-seal; a die; a fragment of pottery from the Fourth Semitic period painted with a design of the octopus; two bronze objects of uncertain use, but possibly intended as supports from which to suspend two fine bronze pots, found in the same cistern, which resemble cooking pots, and have two vertical loop handles projecting above the rim; and another so-called votive-altar with a human figure, possibly a woman, on horseback, which is compared with the vase-painting of the Libyan horse-woman from Daphnae (see Ridgeway's *Origin and Influence of the Thoroughbred Horse*, p. 243).

HAURAN.—**Latin Inscriptions.**—In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 36–37, A. VON DOMASZEWSKI publishes two Latin inscriptions found by the Princeton expedition in the Hauran, one at Il-Kafr and the other at Bostra.

NABLUS.—**Twelve New Samaritan Inscriptions.**—In *S. Bibl. Arch.* XXX, 1908, pp. 284–291 (5 pls.), H. H. SPOER publishes notes on inscriptions found at Nablus, some with sunk letters on Mount Ebal, others among the ruins of houses in and about the town.

SAKJE-GEUZI.—**The Recent Excavations.**—In *Annals of Archaeology and Anthropology*, I, 1908, pp. 97–117 (17 pls.), J. GARSTANG publishes a preliminary report of his excavations at Sakje-Geuzi in northern Syria in 1908 (see *A.J.A.* XIII, p. 77). There are five mounds on the site, all of which contain ancient remains, but the smallest alone was excavated. The main results attained were these: (1) The discovery of a fortification wall 3.50 m. thick, built of small stones faced with larger blocks, and dating

between 1100 and 850 B.C. (2) Upper buildings were found superimposed in the centre of the mound. They consist of modern walls resting on walls of a Roman building, below which are the remains of a structure of about 300 B.C., and lower still a portico of the Hittite period. (3) This portico belonged to a temple or palace, not yet uncovered, and is adorned with Hittite sculptures. (4) A trench was cut beyond the main wall, showing the neolithic origin of the mound with stratified deposits, which will serve as a means of dating subsequent finds. The sculptures consist of seventeen reliefs, for the most part finely preserved. In the middle of the portico, and set back a little from the step, is a drum-shaped pedestal supported by two sphinxes, probably the base for a column. The reliefs are to the right and left along the side walls. On either side is a procession consisting of a lion followed by a man-headed, winged monster, which in turn is followed by three men, one of whom carries a falcon. Another slab shows two men fertilizing the sacred tree. These sculptures probably date from about 850 B.C., and although the motives are Assyrian, they seem to be the work of local artists. The neolithic pottery falls into two main classes, a black incised ware and a painted ware. The latter resembles pottery found by de Morgan at Susa and dated by him in the time of Naram-Sin.

SAMARIA.—*The Excavations of 1908.*—In *The Harvard Theological Review*, II, 1909, pp. 102–113 (3 plans; 18 figs.), D. G. LYON reports upon the results of the first year's work of the Harvard expedition to Samaria. Work was begun April 24, 1908 and continued with interruptions to August 21. Five trial pits were dug at a spot near the village revealing the presence of a large building, the northern end of which was excavated. It was probably a Roman temple. About two hundred Arabic lamps, masses of Roman roof tiles, Greek and Roman pottery and broken glass were found here. More important results were obtained on the citadel. One trench below the summit uncovered at a depth of thirty feet a massive wall supposed to be Hebrew; while another revealed two cisterns, a plastered stone drain, and remains of ancient buildings. On the summit there was found to the north a great stairway originally eighty feet broad and still consisting of sixteen steps. Below is another step of softer stone, and there may have been one or two more at the top. At the foot of this stairway is a supporting wall about eight feet high. Above it, about twelve feet to the south, is a paved platform now about fifty-seven by twenty-seven feet, and beyond this a massive wall extending the length of the platform and running back at right angles to it. These are probably the walls of a temple. On the eastern side the wall was followed for 135 feet. Beneath the platform are remains of earlier walls. West of the stairway, and on a level with the lowest step, a chamber about forty by twenty feet with massive walls was excavated. Other walls as yet unexplored run off to the north and west. A few Greek graffiti and many fragments of Latin inscriptions came to light during the excavations; the only sculptures were a Roman torso, probably of Augustus, and pieces of a large head. A short distance north of the stairway was found an altar about thirteen feet from east to west and half as wide; and beyond this a square pit in which a column cut out of the natural rock still stands in its original position. Fragments of painted stucco were discovered here with Greek letters scratched on them.

ASIA MINOR

A JOURNEY IN PONTUS AND CAPPADOCIA.—In *B.C.H.* XXXIII, 1909, pp. 3-169 (3 pls.; 23 figs.), H. GREGOIRE gives a preliminary report of a journey in Pontus and Cappadocia. The topographical and epigraphical results are to be more fully discussed in the *Studia Pontica*; a special publication will be devoted to the Byzantine churches of Cappadocia. In the present article a brief account of the journey is given. One hundred and twenty inscriptions are published, including all the known inscriptions of Caesarea (Nos. 23-67), and some of the churches are described.

KARA DAGH.—*New Hittite Inscriptions.*—In *S. Bibl. Arch.* XXXI, 1909, pp. 83-87 (2 pls.), A. H. SAYCE describes six inscriptions discovered by W. M. Ramsay and Miss Bell, on an isolated hill called Kizil Dag and on Kara Dagh, and endeavors to give a translation of them.

KUL TEPE.—*Miscellaneous Antiquities.*—In *Rec. Past*, VIII, 1909, pp. 93-96 (3 figs.), ISABEL F. DOBB gives a brief account of certain antiquities in her possession from Kul Tepe, a few miles north of Caesarea Cappadocia. These consist of celts of flint, black stone, and jade; whorls; animal heads of clay; vases; Cappadocian tablets; Babylonian weights of hematite; a Hittite seal cylinder; and many small antiquities of the Greek period.

MILETUS AND DIDYMA.—*A Report of the Excavations.*—The results of nine years' excavation at Miletus and of a shorter term at Didyma were summarized by T. Wiegand and H. Borrmann at the March (1908) meeting of the Berlin Archaeological Society. Among the most important discoveries are: the seventh-century city wall of Miletus, which had a circuit one-half larger than the Hellenistic city; the Senate House, 170 B.C., a typical Hellenistic public building and an example of the partial mixture of Ionic and Doric that marks that period in Asia Minor; a fine Hellenistic gymnasium; the temple for the worship of King Eumenes II, as head of the Pan-Ioniaus, the first temple of this kind to be identified; two magnificent Roman baths; details of the great temple at Didyma, 108 x 55 m.; and a number of long inscriptions concerned with the erection and use of these buildings, with the education of boys, and with the historical relations of the places. (*Arch. Anz.* 1908, cols. 499-507.)

PERGAMON.—*The Recent Excavations.*—In *Ath. Mitt.* XXXIII, 1908, pp. 327-374 (5 pls.; 7 figs.), W. DÖRPFELD reports upon the excavations of 1906 and 1907. The western half of the upper gymnasium on the south slope of the citadel and the region adjoining it on the west were uncovered. The central court (74 x 36 m.) was completely cleared, and proved to have been surrounded in Roman times by two storied marble colonnades of the Corinthian order which took the place of earlier Doric colonnades of trachyte. On the north side of the court the excavation of the central hall and of a small theatre was completed. At the west three halls were found, the central one being a bath. The covered stadium below the southern colonnade was also cleared. The remains to the west of the gymnasium included a temple, perhaps of Asclepius. In addition to the work on this main site, the Greek city wall at the southwest corner of the citadel and a Greek bridge over the Selinus were investigated. In the plain two small tumuli

yielded each a trachyte sarcophagus, with contents undisturbed. The attempt to reach the centre of the largest tumulus, Jiquia-Tepeh, was continued. A brief report of the excavations in 1908 is given, *ibid.* pp. 372-374. The large Roman baths at the eastern end of the terrace of the upper gymnasium were uncovered, and two Greek buildings, one perhaps the prytaneion, were found at the west end. The centre of the Jiquia-Tepeh was reached, but no grave was found. The search for the sepulchral chamber will be continued.

Frescoes in the House of the Consul Attalus. — A drawing of the best-preserved wall which is decorated in the style of the frescoes of Prima Porta shows a socle at the bottom of the wall, divided into three panels by two pilasters. Each of these supports a cantharus with two birds perching on the rim. Above, a meadow is indicated in perspective, with various blooming plants painted in bright colors on a light red background. (P. SCHAZ-MANN, *Ath. Mitt.* XXXIII, 1908, pp. 437-441; fig.)

Inscriptions. — Seventy inscriptions, found during the excavations of 1906 and 1907, are published by P. JACOBSTHAL in *Ath. Mitt.* XXXIII, 1908, pp. 375-420 (pl.). Among them are 5 decrees, 18 lists of ephēbi, 10 dedications, and 15 honorary inscriptions.

Minor Discoveries. — The small finds of the years 1906 and 1907 are discussed by P. JACOBSTHAL in *Ath. Mitt.* XXXIII, 1908, pp. 421-436 (3 pls.). A marble torso, of a style recalling the Gigantomachy, may be a fragment of a seated Asclepius, the cult statue of the temple mentioned above. One of the sarcophagi, that of a man, contained a gold wreath of oak leaves and acorns, two swords, two dogs' heads of gold, which apparently belonged to the swords, and five pairs of sheep. In the second sarcophagus, that of a woman, no gold ornaments were found. There were remains of myrtle wreaths with wooden stems, stalks and leaves of bronze, and buds and berries of gilded clay. Both graves contained a number of lecythi of alabaster. The date is to be placed early in the age of the Pergamene kingdom.

GREECE

EXCAVATIONS IN BOEOTIA AND PHOCIS. — In Πρακτικά for 1907 (published 1908), pp. 108-112, G. SOTERIADES gives an account of the excavations carried on by him in Boeotia and Phocis in 1907. At **Chaeronea** the orchestra of the theatre was excavated, but nothing of importance discovered. A short distance below, there were found statue bases of Roman date and monolithic columns, together with remains of Greek times. At **Orchomenus** the excavation of the great tomb was completed, and it was shown to resemble the much smaller pre-Mycenaean tomb at Drachmani. At **Vranezi**, near by, tombs of the geometric period yielded some fine vases and a few small objects of gold. At **Exarchos**, the ancient Abae, in Phocis many tombs were opened, from which came vases of the fifth and fourth centuries, terra-cottas, small bronzes, terra-cotta *larnaces*, grave stelae, and gold and silver ornaments. The common meeting-place of the Phocians, mentioned by Pausanias, was located at **Kephalovrysos**, but excavation brought to light nothing of importance. The site of the Σχιστὴ Ὁδὸς of the Oedipus story is to be placed at **Davelaiika**, where part of an ancient wagon road has been found, with remains of prehistoric houses near by, rather than at Stene. At **Distomos**, the ancient Ambrosus, Greek and Roman graves

containing objects of gold and silver were opened. Late inscriptions were found in the foundations of the church which seems to occupy the site of an ancient temple. South of Distomos, near the sea, an ancient city was found which may have been Marathus. The acropolis is now called **Hagios Theodoros**. Many undisturbed tombs of the Mycenaean period were found, as well as others of later date. Gold bracelets from the geometric tombs, quantities of vases of all periods, statuettes, and "island stones" were removed to the museum at Chaeronea. The Mycenaean tombs were rectangular, with sloping walls built of small stones, and covered with slabs placed at an angle. A few steps led down to the entrance. The geometric tombs were pits full of burnt fragments.

AMYCLAE.—**The Excavations of 1907.**—In *Πρακτικά* for 1907 (published 1908), A. N. SKIAS reports upon the excavations carried on at Amyclae after the death of Furtwängler, chiefly by his pupil, Fichter. The hope of finding the foundations of the throne of Apollo under the church of Hagia Kyriake was not realized, although some fragments, including two small columns of a mixed style, Doric and Ionic, may belong to that monument. A little below the top of the hill, part of the temple enclosure was uncovered, near which were found many small dedicatory vases and sherds, chiefly geometric, though a few were earlier and a few of later date. A small bronze statuette of a nude youth wearing a helmet and in the attitude of jumping was found near the foot of the hill, although no excavating has as yet been done at that place. It is now in the museum at Sparta.

ATHENS.—**An Italian Archaeological School.**—It is announced that through the efforts of the Ministero della Pubblica Istruzione an appropriation has been made for the establishment of an Italian archaeological school at Athens (*Boll. Arte*, II, 1908, p. 479). A villa has been rented, and the school will be opened in the autumn of 1909. At present the field work will be limited to supplementing the Italian excavations in Crete. (*Nation*, June 10, 1909, p. 591.)

The Restoration of the Erechtheum.—In *Πρακτικά* for 1907 (published 1908), pp. 125-128 (pl. of 4 figs.), N. M. BALANOS reports upon the progress made in the restoration of the Erechtheum in 1907. The whole of the frieze on the east front, together with the corner slab at the southeast end, has been put in place, and above the frieze the portions of the cornice which still exist. The greater part of the cella wall on the south side has been built up out of existing blocks as far as the architrave.

CRETE.—**LATO.**—**New Inscriptions.**—In *Εφ. 'Αρχ.* 1908, pp. 197-244 (fig.), S. A. XANTHOUDIDES publishes twenty-four inscriptions from various places in Crete, the majority from Lato (Hagios Nikolaos), on the Gulf of Mirabello. The more interesting of them date from about the second century B.C. Among them are a votive inscription recording repairs and restorations made by the Hierapytnians in the Dictaeon sanctuary at Palaikastro, fragments of three treaties of Lato, a boundary inscription, and a votive inscription recording the building of temples to Athena Deraimitis (?) and to Eileithyia, and a peribolus surrounding them. An appendix contains notes and corrections on eight Cretan inscriptions published within the last twenty years.

DELOS.—**A Bilingual Inscription.**—In *C. R. Acad. Insc.* 1908, pp. 546-560 (fig.), C. CLERMONT-GANNEAU publishes a bilingual inscrip-

tion, Minaean and Greek, recently found in a house northeast of the agora of Theophanes at Delos. It is a dedication to the god Oaddos (Waddum) carved on a conical base or altar. No other such inscription is known. According to various German scholars, the Minaean kingdom came to an end in the eighth century B.C., but this inscription to the Minaean national god dates from the second century B.C. In *Or. Lit.* XII, 1909, cols. 59-60, F. HOMMEL shows that the Minaean inscription is much older than the Greek paraphrase which accompanies it. It points to the existence of a South Arabian colony in the Greek islands at an early date. Adramytion is connected etymologically with Hadramaut. Waddum is another name for Hubal, and from Hubal the Greek name Apollo is derived. The mother of Hubal is al-Lat, from which Leto, the mother of Apollo, is derived. This inscription is likewise discussed, *ibid.* cols. 60-65, by O. WEBER, who also comes to the conclusion that the Greek text is much later than the Minaean which accompanies it, and is a rude attempt at giving its sense by a secondary hand. This conclusion he confirms by the absence of the names of the dedicators from the Greek text, the lack of exactness in the translation, and the date of the Greek type of writing. The Minaean letters show very curious forms, which may perhaps be due to the fact that they were cut by sculptors who were unfamiliar with the Minaean alphabet.

DELPHI.—Recent Discoveries in the Sacred Precinct.—In *Berl. Phil. W.* XXIX, Nos. 5 to 12, and 24 to 26, H. POMTOW reports upon his researches and excavations at Delphi in the fall of 1908. The most important results were: (1) The finding of the Treasury of the Corinthians. Unable to agree with Homolle, who had located it on the so-called "*terrasse inférieure*," a position not to be reconciled with the accounts of either Plutarch or Pausanias, Pomtow fixed on the oblong structure at the southeast bend of the Sacred Way, which had been identified by Homolle as the base supporting the chariot dedicated by Cyrene, as the only possible site of the Corinthian Treasury. Excavations soon showed that the structure extended much farther west and north than the French plans show, its real dimensions being 5.75 m. by 8.55 m., the usual proportions of a treasury. The stones which the French excavators had thought to form the northern wall in reality proved to be blocks forming the pavement of the Treasury, still found *in situ*, and extending farther to the north. It was found impracticable to excavate the western side of the Treasury further on account of the masses of earth under which it was buried, and of the nearness of the Sacred Way. An inscription, now in the basement of the museum, which reads in large archaic letters KORIN [θίων], belonged to this, the oldest of the treasuries. (2) Second in importance, Pomtow considers the bringing to light of the remains of the Tholos of Sicyon, which were used as a solid foundation for the treasury later built on this site. Closely and carefully packed together were found thirteen columns, with capitals, architraves, round triglyphs with metopes, circular steps and wedged shaped pavement-stones, rounded on both sides. The Tholos can now be entirely reconstructed. It stood on a circular platform 6.40 m. in diameter and consisted of thirteen slender columns without any inner wall. From the fact that architectural fragments were found on the site, not circular in form (especially two architraves of the same dimensions as the round ones), Pomtow conjectures that a small portal with four columns in front formed the entrance to the Tholos;

and further concludes that the archaic sculptured slabs which had been found on this site (representing the bull carrying off Europa, the Calydonian boar, the Argo, Idas and the Dioscuri; see Furtwängler in *Berl. Phil. W.* 1894, p. 1275) served as metopes or as a continuous frieze to this portal. The style of the capitals and sculptures points to the early sixth century. The Tholos may have been erected by Cleisthenes, tyrant of Sicyon, between 580 and 570 B.C., and in view of the researches of H. Thiersch (see his 'Antike Bauten für Musik,' *Zeitschr. f. Geschichte d. Architektur*, II, pp. 27-50), Pomtow holds it to have been built to serve a musical purpose. In later years it was pulled down by the Sicyonians who erected a treasury in the usual style. Of further results of Pomtow's campaign the following may be mentioned: Of the round pedestal of the statue of Phaylus eleven fragments were found. Fresh measurements of the Lysander monument show that the statues of the admirals were placed in the chamber along the back wall. In the semicircular monument of the Argive kings the original position of all the bases of the statues on the lower pedestals has now been ascertained. It was shown that the bases of the principal statues bore epigrams. Through the deciphering of the letters *INO* on the upper side of the base of the monument of the Tarentines, the identification of its site is now assured. The large tithe-stones found near by belonged to it. Of the offering of the Cnidians a stone belonging to the base was found in the parodos of the theatre, with an inscription reading

Κνίδιοι τῷ Ἀπόλλωνι
ἀπὸ τῶν πολέμων δεκάταν.

This block is the largest one thus far found at Delphi. Of the two treasuries identified by Homolle as those of the Cnidians (the larger one) and of the Megarians (the smaller one to the north) Pomtow identifies the latter as that of the Cnidians, the other that of the Siphnians. The sculptured frieze and the large Caryatids belong to this last treasury; probably also the awkward gable-sculptures. Pomtow dates the building of the Cnidian Treasury between 546 and 541 B.C., and the Siphnian before 525 B.C. The identity of the large, oblong structure west of the Siphnian Treasury is now established by an inscription (δ)πὸ Τυρσαν(όν). It bore the offerings of the Lipareans. The Theban Treasury is Homolle's Boeotian Treasury. The Athenian Treasury has been reconstructed, unfortunately partly with material that seems to have belonged to that of the Cnidians. The gables also had sculptures of which the subject seems to have been the carrying off of the tripod. Two new slabs were found. Back of the Athenian Treasury are two others, one of Potidaea (the smaller to the north), the other of Syracuse (to the south). The base of the bronze goat of Cleonae, consisting of eleven blocks, has been found; the image itself was of huge proportions. The long structure to the south of the Sibyl's Rock, along the Sacred Way, on the left side, Pomtow thinks, supported the bases and statues of the *ἑταῖραι*. The treasury, southeast of the newly discovered site of the Corinthian Treasury, built against the wall of the sacred precinct must have been that of the Boeotians (not mentioned by Pausanias) erected after the Phocian War (346 B.C.). Material and style prove it to be the latest of the treasuries at Delphi. Homolle's Corinthian Treasury, Pomtow holds to be that of Clazomenae. The building south of the Boeotian Treasury which

Homolle ascribed to Cyrene, he identifies as the Treasury of the Massiliots and Romans. The remains prove it to belong to the end of the fifth or the beginning of the fourth century, and an honorary decree mentions 'Ιεροκλῆς Τέρωνος Συρακούσιος, the friend of the Romans. Only three foundations of treasuries remain now to be identified: the so-called "yellow house" and the two to the east of the Theatre. From Pomtow's topographical survey it follows that Pausanias has enumerated only the buildings and monuments situated on the Sacred Way; but also that none of these were left unmentioned by him with the exception of the Council House and the Treasury of the Acanthians and Brasidas. In addition Pomtow publishes a number of inscriptions, the most interesting one from a base which supported the statue of that famed *περιοδονίκης* Theogenes, son of Timoxenus, of Thasos (in the editions of Pausanias both names are given wrongly as Theagenes and Timosthenes). The total number of his victories is here given as 1300 (Plutarch, 1200; Pausanias, 1400), and it is also shown that the list of victories from the well-known base in Olympia must be referred to this same athlete and not to Dorieus, as Foucart supposed. The real list of Dorieus's victories is the one published by Hughes, *Travels*, p. 365 (*C.I.G.* 1715).

EUBOEÆ. — Various Discoveries. — In *Πρακτικά* for 1907 (published 1908), pp. 114–119, G. A. PAPAΨΑΛΕΙΟΥ gives an account of his excavations in Euboea in 1907. At *Chalcis* five tombs of the classical period were opened, one of which was 3 m. long, 2 m. wide, and 1.60 m. high. This had two benches, one 1.20 m. high, and the other 0.40 m. high, upon each of which lay a skeleton. Vases of two new shapes were found: a *prôchous* with a long neck and beak-like mouth, and a peculiar black cup with its edges bent outward. Besides the tholos tomb excavated at *Oxylithos* (*A.J.A.* XII, p. 362), one was uncovered at *Vrusaki* and another at *Bellusia*, but nothing of importance was found in them. At a place called *Ptelea*, at *Oxylithos*, remains of a building 8.35 m. by 6.17 m., built of large stones, were found. This was probably a temple. At *Eretria* seven tombs were opened in one place and ten in another, all of the classical period, containing vases and some jewellery.

KAKOVATOS. — Recent Discoveries. — In addition to the three bee-hive tombs excavated by Dörpfeld in 1907 and 1908 at *Kakovatos* (*A.J.A.* XIII, p. 79), there have now been discovered other tombs of the same kind. On the top of a hill Dörpfeld has found remains of a temple with numerous cultus objects and ex-votos, which suggest that it was a shrine of *Artemis Limnetis*. (*Hellenic Herald*, III, 1909, pp. 35–36.)

MEGALOPOLIS. — Recent Excavations. — In *Πρακτικά* for 1907 (published 1908), pp. 122–125, K. STEPHANOS describes his excavations in the vicinity of Megalopolis. At *Vromosella* some unimportant tombs were opened. At the site of the ancient *Trapezus* foundation blocks and many vase fragments came to light. At *Choune*, where the *Μεγάλοι Θεοί* were worshipped, foundation blocks, vases, and terra-cottas, some of which were archaic, were found. West of Megalopolis four tombs were excavated, but without important results.

OLYMPIA. — Prehistoric Remains. — The importance of pre-Dorian Olympia is established by Dörpfeld's recent investigations. Excavations around the Metroon and the Treasuries have brought to light remains of small dedicatory temples of prehistoric date. In a black, sandy stratum

were discovered sherds and other earthenware objects, which in their form and incised decoration show close affinity to the pottery found on neolithic sites. (*Nation*, May 27, 1909, p. 545.)

PAGASAE. — Recent Discoveries. — Five more towers have been found at Pagasae by A. S. Arvanitopoulos, all dating from about 50 B.C. One is about 40 m. wide, and for a space of about 30 m. is full of painted grave stelae (see *A.J.A.* XII, pp. 103, 364–365; XIII, p. 211). Within the town are remains of a stoa about 56 m. long, dating from the fourth or third century B.C., and near it is a small temple. The agora, which was in this vicinity, was apparently large and contained several other buildings. (*Hellenic Herald*, III, 1909, p. 35.)

SPARTA. — Recent Excavations. — At a meeting at the British School at Athens, January 22, 1909, R. M. Dawkins described the work of the preceding season at the temple of Artemis Orthia at Sparta. In order to reach the level of the pavement of the sacred enclosure, a considerable portion of the Roman amphitheatre was removed. Several inscribed stelae, including one showing the façade of the sixth-century temple in relief, were discovered during the process. A short distance south of the archaic temple were found remains of a still older building, which had crude brick walls and a cella divided lengthwise by a single row of wooden columns. Numerous small objects came to light, including terra-cottas, lead figurines, carved ivories, and pottery. The last was especially important, as showing the development at Sparta of what has hitherto been called Cyrenaic ware. The speaker pointed out that there was a gradual decadence in the industrial arts at Sparta from the seventh to the fifth century, which he attributed to the military constitution. (*Athen.* February 6, 1909, p. 174.)

Mycenaean Remains. — In excavating the so-called Menelaon at Sparta remains of Mycenaean date, consisting of bits of fresco painting and potsherds, were brought to light from beneath the monument and in an adjoining building. These are the first Mycenaean remains found at Sparta. The Menelaon is built of large blocks, and apparently dates from the fifth century B.C. A little below it a number of bronze and lead votive offerings, dating from the seventh century, were found, including beads, axes, fibulae, and plaques; also a large number of terra-cottas. (*Nation*, June 17, 1909, p. 613.)

SUNIUM. — Discoveries South of the Temple of Poseidon. — In *Πρακτικά* for 1907 (published 1908), pp. 102–104, V. STAES gives briefly the results of his excavations at Sunium in 1907 south of the temple of Poseidon (see *A.J.A.* XII, pp. 95, 366). A few additional pieces of the colossal statues, which he regards as Apollos, were found; but the most important discoveries were made in a pit of pre-Persian date. Here he found about fifty scarabs; twelve gems, some of which are engraved; two vultures of Egyptian porcelain; two fragmentary statuettes of Egyptian divinities; a terra-cotta ex-voto in the shape of a foot; about one hundred small geometric and Protocorinthian vases; a small bronze figure of a warrior; and many pieces of terra-cotta tablets, some painted and some with reliefs, representing Heracles wrestling with the lion.

THASOS. — New Inscriptions. — A number of new Greek inscriptions and one in Latin, several of them in facsimile, together with bibliographical and other notes on previously known Thasian inscriptions, are

published by J. BAKER-PENYOIRE and M. N. TOD in *J.H.S.* XXIX, 1909, pp. 91-102 (3 figs.). The earliest go back to the fifth, and perhaps to the sixth, century B.C., and are in the local alphabet.

THESSALY.—**The Excavations of 1907.**—In *Πρακτικά* for 1907 (published 1908), pp. 147-182 (2 pls. of 4 figs. each), A. S. ARVANITOPOULOS describes the excavations in Thessaly in 1907. At **Pharsalos**, on the site of some Turkish baths near the northwest corner of the modern market-place, remains of a stoa of the fourth or third century B.C., with Ionic columns, were found. A Turkish mosque, built of ancient materials on the top of a hill, seems to occupy the site of a temple of Zeus Thaulius. At **Pherae**, remains of a small marble building, apparently in the shape of a *templum in antis*, were discovered near the larger of the two mounds northeast of the town. It dates from the fourth or third century B.C., and is probably the shrine of a local hero. Near the church of Hagios Charalampous, remains of a small Doric building of the fifth or fourth century B.C. are shown by inscriptions on vases to belong to a temple of Heracles. Some of the pottery dates from the sixth century B.C., and it is expected that further excavations will reveal an earlier shrine. Near the place called Mati prehistoric remains were found; and along the road leading from the large mill to Velestino pieces of Doric columns seem to indicate the site of a temple. At **Phthiotic Thebes** the stoa already known was examined, and found to have been double, with wooden columns. Near by were some house walls, and to the south of it the foundations of a poros temple 19.30 m. long and 14.08 m. wide. On the acropolis, portions of a temple, probably that of Athena Polias, were uncovered, as well as prehistoric remains. At **Demetrias** the walls seen by Dodwell, and believed to belong to a temple, were probably those of a church. At **Pagasae** the most important find was the painted stelae (*A.J.A.* XII, pp. 103, 364-365; XIII, p. 211); but the theatre was partially excavated, and some of the architectural fragments belonging to it found in a late building which covers the stage and part of the orchestra.

ITALY

CELLA DATI.—**Prehistoric Remains.**—The description of objects in stone, bronze, terra-cotta, etc., found near Cremona at the neolithic settlement of Cella Dati, is continued by G. PATRONI in *B. Pal. It.* IV, 1908, pp. 192-210 (pl.; 4 figs.).

CHIUSI.—**An Attic Vase.**—At Chiusi, in a tomb which had been rifled, there were found fragments of a red-figured Attic vase of the fifth century B.C. (*Rend. Acc. Lincei*, XVII, 1908, p. 582.)

FERENTO.—**Inscriptions from the Baths.**—Excavations have disclosed the site of the *thermae* of the ancient city, from which two interesting inscriptions of good period have been recovered entire, one to MARTI - AVG, the other in honor of a certain L. Pomponius Lupus, *quinquennalis iterum*, who had served as tribune of the fourth Macedonian legion, and as prefect of a cohort of Macedonian and of Lusitanian cavalry, and of Balarians. (*Not. Scav.* 1908, pp. 373-381; figs.)

FLORENCE.—**Acquisitions of the Museo Nazionale.**—The Museo Nazionale of Florence has recently acquired 140 ancient seals from the collection of Giuseppe Salvatore. (*Boll. Arte*, II, 1908, p. 478.)

FONDI.—**An Inscription of the Gens Trebia.**—A sepulchral inscription with four names, found between Fondi and Sperlonga, gives the first instance of the mention of the *gens Trebia* in the territory of the ancient Fundi. (*Not. Scav.* 1908, p. 391.)

MARANOLA (FORMIAE).—**Inscription of a Mamurra.**—A fragmentary stone of the first century A.D., with the words AVFILLIAE . P . | MAMYRRÆ, furnishes the first occurrence of the name Mamurra in an inscription from the native region of Caesar's famous *praefectus fabrum*. The only other epigraphic occurrence of the name is on a stone from Thibilis (Numidia), where a M. Vitruvius Mamurra is mentioned (*C.I.L.* VIII, 18913). G. Q. GIGLIOLI conjectures that this Vitruvius Mamurra must have derived his name from Latin stock, and that, as Vitruvii were common about Formiae, the famous Mamurra may have been of that *gens*. (*Not. Scav.* 1908, pp. 391-394.)

MARINO.—**A Prehistoric Grave.**—An ossuary from the cemetery of Marino displays fictile ware like that found in other early graves of the same region, but fibulae of the early Iron Age, the burial belonging, accordingly, to a somewhat later period than most of the early Latian burials thus far recorded. (*Not. Scav.* 1908, pp. 346 f.)

OSTIA.—**An Oriental Sanctuary.**—In *C. R. Acad. Insc.* 1909, pp. 181-191 (fig.), D. VAGLIERI gives a brief account of the sanctuary of an oriental divinity recently found at Ostia in a street connecting with the Street of the Tombs. It is 12.15 m. long and 5.60 m. wide, and has the appearance of a temple of Mithra. An inscription found in the excavations seems to prove that it was dedicated to Jupiter Sabazius, the Phrygian Sabazis.

A Roman Dupondius.—In August, 1908, a hoard of 400 to 500 pieces of Roman bronzes of republican times was found by workmen at Ostia, and divided among themselves. FR. GNECCHI came later into possession of 176 pieces, among them a single specimen, the third known, of a struck *dupondius*, one of the second, and last, republican issues of this denomination. It is pictured, described, and discussed in *R. Ital. Num.* XXII, 1909, pp. 11-19, by the owner, who argues that the reduction of the *as* to the crucial standard must have taken place as late as the period between 159 and 112 B.C.

PALESTRINA.—**Roman Weights.**—A remarkable series of Roman weights has been discovered in an ancient well at Palestrina. They are of basalt, and duly marked II, III, V, X (*librae*), and I, II, III (*unciae*), each numeral being enclosed in a circle with a tail, resembling a Q. From the fact that they were found near the basilica, and for other reasons, it has been conjectured that they were standard weights. (M. LAZZARINI, *B. Com. Rom.* XXXVI, 1908, pp. 69-76.)

POMPEII.—**Recent Excavations.**—The work continued at Pompeii in Reg. VI, Ins. 16, Nos. 35-40, disclosed two small houses and a shop, in which were found a considerable number of small objects of no unusual character, and a few fair wall-paintings, one representing possibly a recitation scene. (A. SOGLIANO, *Not. Scav.* 1908, pp. 359-370; 3 figs.)

A New Villa.—An exceptionally fine villa has been discovered on private land within six hundred feet of the point in Pompeii where the government is now working. It contains several rooms decorated with great elegance, and a large triclinium in the best Pompeian style. On the

walls of this triclinium are a number of figures a little less than life-size, admirably done. One group represents Silenus offering a drink to a man who bends before him and eagerly presses the cup to his lips. On another wall a figure stands before a prone female figure, possibly an Ariadne, but this fresco is damaged. On the third wall a large winged Victory appears, striking a female figure, who tries to avoid her blows, while a third kneels, praying to the goddess to pardon the guilty one; and a fourth, standing behind, urges her on with clashing cymbals. The expression of these figures, the brightness of the colors, and the truth and likeness of their movements, are said to be extraordinary. A rich cornice, containing a beautiful and original design of maskers, runs around this room. (*Nation*, July 1, 1909, p. 21.)

Metrical Inscription.—In *Rend. Acc. Lincei*, XVII, 1908, pp. 555-572, G. ZOTTOLI interprets a metrical graffito discovered by himself at Pompeii, and reading as follows:

*Aedilem Proculam cunctorum turba probavit:
Hoc pudor ingenuus postulat et pietas.*

The Proculus referred to he identifies with P. Paquius Proculus, unanimously chosen duumvir in 74 and 79 A.D., the wealthy baker whose portrait, with that of his wife, was found in one of the Pompeian houses. Zottoli regards the inscription as accusing Proculus of unnatural vice, whence the ironical feminine form *Proculam*.

ROME.—**An Acquisition of the Museo delle Terme.**—The museum in the Baths of Diocletian has acquired from Signor Ernesto Magnani a standing statue of Heracles. (*Boll. Arte*, II, 1908, p. 478.)

The Excavations on the Janiculum.—In *C. R. Acad. Insc.* 1908, pp. 510-529 (2 plans; 3 figs.), P. GAUCKLER reports upon the excavations carried on under his direction at the site of the *Lucus Furrinae* on the Janiculum. The predictions which he made in *C. R. Acad. Insc.* 1907, pp. 134 ff., based upon a study of inscriptions found on the villa Sciarra in 1906 (*A.J.A.* XI, p. 359), have all been fulfilled. At the bottom of a well were found three grottoes, from which came the water of the spring used in connection with the sanctuaries. This spring has now been restored to its former channel. The basin into which it originally fell was found in 1902, and is now in a private collection in Rome. The sanctuary of the Syrian gods, to which the spring belonged in later times, has been found, and in it the torso of a seated male divinity, perhaps the Syrian Baal. At the east end of the temple is an altar, under which was a box-like cavity containing the upper part of a skull. This may point to a human sacrifice of consecration such as is known in various oriental cults. Further details are given by R. LANCIANI in *Athen.* March 13, 1909, pp. 324-325. The original sanctuary, built by Gaionas in 176 A.D., was abandoned 150 years later and another built at a higher level. This was carelessly constructed without foundations. It comprises a central assembly-room facing east and west, with a triangular altar in the middle, and a square one in the apse at the east end, under which the skull mentioned above was found. The assembly-room is surrounded by five or six chapels, in the plan of which the triangular shape prevails. Two feet beneath the floor of the temple two statues were discovered, one a young Bacchus absolutely perfect, with

head and hands heavily gilded; the other a young Isis of black basalt, perhaps an Egyptian work. These were probably hidden by the worshippers after the decree for the suppression of such societies in 377. In the core of the triangular altar was found a lion-headed Mithra with serpents coiled about it, but so stained by the five eggs buried with it that the material of which it was made has not yet been ascertained. (Cf. *Boll. Arte*, III, 1909, pp. 77-78.) In *C. R. Acad. Insc.* 1909, pp. 125-127 (plan), M. DIEULAFOY argues that the two temples really belong together and supplement each other. The western temple corresponds to the *izehnè khanè*, or house of prayer of the Persians; and the eastern to the *ayadana*, devoted to the cult of the sacred fire. The eastern temple is very similar in plan to one excavated at Susa.

Excavations along the Via Portuensis. — Railway excavations along the line of the Via Portuensis have brought to light many epitaphs in columbaria and other tombs. The ancient cemetery between the Via Pinciana and the Via Salaria also continues to yield quantities of sepulchral inscriptions. (G. GATTI, *B. Com. Rom.* XXXVI, 1908, pp. 98-101; pl.; fig.)

The Via Collatina. — A bit of the Via Collatina was uncovered in the vicolo Malabarba. There was also found a marble sarcophagus containing the skeleton of a woman, protected by a casing of tiles with stamps of the year 143 A.D. (*Rend. Acc. Lincei*, XVII, 1908, p. 575.)

The Via Flaminia. — A bit of the ancient Via Flaminia has been brought to light at the corner of the Victor Emmanuel monument nearest the Piazza Venezia. Near by were constructions in tufa and in brick. (*Rend. Acc. Lincei*, XVII, 1908, p. 574.)

Sculptural Fragments. — Excavations by the Villa Spithöver uncovered, in a cavity made apparently to conceal them (perhaps not in ancient times), two marble fragments of good design and execution. The first represents a Silenus, lacking the legs; the other is the lower part of a slab carved on both sides, depicting two dancing fauns, and the wreathed heads of a Maenad and a Silenus. (*Not. Scav.* 1908, pp. 347 ff.; 3 figs.) Other fragments from the same region are pictured and described, *ibid.* pp. 382 ff. About 4 km. from the city, on the Via Praenestina, two reliefs from a circular monument were found, showing two female figures in full flowing drapery, one standing, the other in rapid motion to the right (*ibid.* pp. 353 ff.; 2 figs.). A life-size marble head of a bearded man was found on the Via Aurelia, between the Via Aurelia antica and the Via delle Fornaci. (*Rend. Acc. Lincei*, XVII, 1908, p. 580.)

A Republican Inscription. — A very valuable republican inscription has lately been secured for the Conservatori museum (Fig. 1). It is published by G. GATTI in *B. Com. Rom.* XXXVI, 1908, pp. 169-226 (3 figs. and a plate in the full size of the original). Discovered some time ago, — the exact provenance does not appear, — it has at last attracted due notice. The bronze plate, 0.29 m. high, 0.51-0.52 wide, has suffered chiefly at the upper right-hand corner. Cn. Pompeius Strabo, father of the triumvir, records the gift of citizenship, under the recently enacted Lex Julia, to a *turma* of auxiliary cavalry from Spain which had served under him in the Social War; also of certain *dona militaria* to the same troop. In spite of the lacuna above mentioned, the document preserves the names of some forty-five officers who composed the *concilium* and approved the grants. The date is

90 B.C., or early in 89. GATTI'S edition is supplemented by L. CESANO'S essay on the coins minted by the Italian allies during this war (*ibid.* pp. 227-240; 6 figs.).

Funerary Inscriptions.—At Prati Fiscali were found terra-cotta ornaments with Egyptian scenes, and a number of funerary inscriptions, one of



FIGURE 1. — INSCRIPTION OF REPUBLICAN TIMES.

which, a metrical inscription in Greek, was dedicated by her husband to a midwife named Julia Primigenia, who, after saving the lives of many women, could not herself escape death. (*Rend. Acc. Lincei*, XVII, 1908, p. 575.)

Recent Finds of Coins.—Besides the hoard of republican bronzes found at Ostia, a number of important imperial coins, from Rome and elsewhere, are minutely described by Fr. GNECCHI in *R. Ital. Num.* XXII, 1909, pp. 19-26 (pl.).

SASSARI.—**Acquisitions of the Museum.**—The museum of antiquities at Sassari, Sardinia, has recently received by gift a number of inscriptions, fragments of vases of the Carthaginian and Roman periods, objects of bronze, etc. (*Boll. Arte*, II, 1908, p. 479.)

SICILY.—**Prehistoric Tombs at Gela.**—In *B. Pal. It.* IV, 1908, pp. 155-168 (fig.), P. ORSI continues his description of the prehistoric tombs of Gela, with an estimate of the results of the excavations.

SGURGOLA.—**A New Brick-stamp.**—A new brick-stamp of early date (as shown by the form SERVOS) has been found at Sgurgola (near Anagni), and added to the collection in the Antiquarium on the Caelian. (G. GATTI, *B. Com. Rom.* XXXVI, 1908, pp. 48-52; fig.)

TEANO.—**Baths.**—A great thermal establishment has been excavated at Teanum Sidicinum, and is described at length, with plans and views, by E. GABRICI in *Not. Scav.* 1908, pp. 399-416 (13 figs.).

VICENZA.—**Necropolis.**—Near the church of S. Felice excavations have brought to light some Christian and some pagan tombs. In one of the latter the undisturbed skeleton had a small bronze coin lying by its left

hand. Cremated and inhumated bodies lay in the same necropolis, which perhaps dates from the third century of the Christian era. (*Not. Scav.* 1908, pp. 337 ff.)

SPAIN

NUMANTIA. — **The Excavations of 1908.** — The fourth campaign of excavation (1908) completes twelve months of actual work, one-quarter of which has been given to the Iberian city, the rest to the Roman works. Many features of the latter are only now fully understood. On the hill El Castillejo, the most important site in the line of circumvallation, three superimposed legionary camps are distinguished. The latest is that of Scipio, 134–133 B.C., probably his own headquarters; the second, which is very solidly built of sandstone and contains a cistern-room with channelled floor, probably belongs to Marcellus, 152–151; and a third, of which the cavalry quarters remain, is perhaps that of Pompey, 141–139. Scipio's own praetorium has the form of a Greek peristyle house, which he perhaps introduced into Roman military usage. In these and the other fortified camps many points of arrangement are of interest for comparison with the German *limes castella* and to illustrate written descriptions. The small finds, such as coins, weapons, and pottery, are of value for their exact dating. The very late discovery of another large, fortified camp at the village of Renieblas, six km. from the city, renders a fifth campaign necessary. A new map of the whole district has been made by a German expert. (A. SCHULTEN, *Arch. Anz.* 1908, cols. 477–498; 8 figs.)

FRANCE

PRE-ROMAN REMAINS IN FRANCE. — In *R. Ét. Anc.* XI, 1909, pp. 53–68, M. CLERC publishes notes on several pre-Roman sites in France. Near **Cavallion** the hill called "Mont Saint-Jacques" is the site of a pre-Roman town. Numerous fragments of pottery are to be found in the vicinity. At **Riez** the pre-Roman town is to be sought near the hill Saint-Maxime, while the Roman town lay near the four columns which still stand with their architrave. These columns probably formed part of a temple, but it is not known to what deity it was dedicated. At **Les Pennes-Mirabeau** there is the site of a pre-Roman town known locally as "Collet Redon" or "La Tête Noire." The site is about 50 m. by 20 m. and difficult of access. Unauthorized excavations have been carried on here, but little is known of the results. Corn found in one vessel shows the character of the place. Fragments of native hand-made pottery are abundant; and many pieces of Greek vases have been picked up. They are Ionic of the seventh century B.C., and Attic of the fifth and fourth centuries, though some of the latter may be Campanian. No Roman pottery has been found. The town was probably not inhabited after the second century B.C. A Latin inscription at **Moustiers-Sainte-Marie** is also published.

AIX. — **New Inscriptions.** — In *R. Ét. Anc.* XI, 1909, pp. 49–52 (fig.), M. CLERC publishes three fragmentary Latin inscriptions found in the vicinity of Aix, and a terra-cotta plaque, 16 cm. long by 8 cm. wide, divided into squares by lines. In each square is a Greek letter. The writer makes no attempt at decipherment, but is inclined to believe that it is a magic tablet. It is now in the museum at Aix.

FRÉJUS. — A Mosaic. — A fine mosaic has been discovered at Fréjus, representing a cock-fight, together with other animals. (*Röm.-Germ. Korrespondenzblatt*, II, 1909, p. 10.)

LA CHAPELLE. — Three Tumuli. — In *R. Arch.* XIII, 1909, pp. 216-232, M. PIROUTET and J. DÉCHELETTE describe three small tumuli at the western foot of Mont Poupet, near the hamlet of Ouay in the commune of La Chapelle. The three are nearly contemporaneous, and their contents are characteristic of the second Age of Bronze, according to the classification of Montelius. A description and classification of the tombs of the Bronze Age in Franche-Comté is added.

MONTAGNAC. — The Lower Part of a Municipal Statue. — In *B. Soc. Ant. Fr.* 1908, pp. 218-219, A. HÉRON DE VILLEFOSSE calls attention to the lower part of a Roman statue found at Montagnac. It represented a man, clad in the toga, standing with left foot advanced; but it is broken off at the knees. At the left of the figure is a *capsa*. The statue belongs to the so-called municipal type, which is common in Africa but has rarely been found in Gaul.

MONT GUÉRIN. — Excavations. — In *R. Arch.* XIII, 1909, pp. 30-45, MAURICE PIROUTET describes a week's excavations in the camp at Mont Guérin (Jura), in the commune of Montmirey-la-Ville. There was at this place a settlement at the end of the neolithic or the beginning of the Bronze Age, but the most numerous relics (bronzes, vases, terra-cottas, etc.) belong to the beginning of the Hallstatt III period. Three fragments of Greek amphoræ confirm the existence of commercial relations with the Mediterranean regions.

PARIS. — Acquisitions of the Louvre. — Among the recent acquisitions of the Louvre are: (1) A female head of marble of the first half of the fifth century, perhaps in the style of Calamis, formerly in the Borghese palace (*J.H.S.* XIV, 1894, pp. 198-205; *Gaz. B.-A.* 1909, pp. 52-64.). (2) A bearded male head from Macedonia. (3) A funeral stele from Laurium, inscribed *Λεωκράτης Ὀρτυνείς*. (4) A bronze statuette representing a reclining goat, of good style, from Cephisia. (5) A bronze diecast's ticket from Athens, inscribed *Εἰρηνοκλέης Ἀφιδναῖος*, published in *B. Soc. Ant. Fr.* 1908, pp. 352-360 (fig.). (6) A bronze statuette of Zeus with wreath on head, standing, partially draped. His extended right hand holds an eagle; his left leans on a sceptre. (7) A small bronze head of Dionysus crowned with ivy, from Syria. His long hair falls down upon his shoulders, and two small horns appear above the forehead. (8) A mosaic from Carthage, representing a nude winged Eros, holding a basket full of black grapes. (A. HÉRON DE VILLEFOSSE and E. MICHON, *B. Soc. Ant. Fr.* 1908, pp. 368-375; 2 figs.)

ROQUEFEUIL. — A Head of Silvanus. — In *B. Soc. Ant. Fr.* 1908, pp. 226-227, A. HÉRON DE VILLEFOSSE reports the discovery at Roquefeuil, between Trets and Pourrières, of a marble head of Silvanus. It is 28 cm. high, of rather good workmanship, and represents the god bearded and wearing a crown of pine twigs. The marble has become yellow through age.

SALINS. — Greek Vases in a Hallstatt Oppidum. — In *R. Arch.* XIII, 1909, pp. 193-212 (pl.; 6 figs.), M. PIROUTET and J. DÉCHELETTE describe the *oppidum* called "Camp du Château," in the commune of Salins (Jura). Five strata are distinguished and the objects found in them de-

scribed. Tombs were also found in the neighborhood. Fragments of black-figured and red-figured Greek vases, which must be dated in the sixth or the early part of the fifth century B.C., were found in the *oppidum* in conjunction with bronzes, etc., of the Hallstatt III period, thus confirming the chronology arrived at from other data. Similar discoveries elsewhere are noted. The commercial relations of the south with Gaul were evidently important in the sixth century B.C.

GERMANY

NEOLITHIC SETTLEMENTS IN GERMANY.—In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 17-23, A. SCHLIZ describes neolithic settlements at Oberseisheim, Nekarsulm, and other places with stone implements and pottery (see *A.J.A.* XIII, p. 98).

BADEN-BADEN.—**Latin Inscriptions.**—In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 23-24, F. HAUG publishes two sepulchral inscriptions of the first century, marking the graves of soldiers.

BERLIN.—**Prehistoric Stone Vessels from Egypt.**—In *Ber. Kunsts.* XXX, 1909, cols. 220-226 (10 figs.), H. RANKE gives a brief account of some remarkable, prehistoric stone vessels recently acquired by the Berlin museum.

They were found at Abusir-el-meleg, east of the Fayum, in 1905 and 1906, when about 1200 graves were opened. They are often in the shape of animals, and in other respects imitate vessels of clay. One reproduces a basket. Stone vases found in royal tombs of the first dynasty are far inferior to those of the prehistoric period. The writer also publishes an interesting fragment of a stone vase from a prehistoric necropolis in Upper Egypt upon which appears in relief an Egyptian warrior with raised axe, driving an enemy before him (Fig. 2). Nothing like this has previously been found in Egypt.



FIGURE 2.—FRAGMENT OF A
STONE VASE.

An Egyptian Sketchbook.—In *Ber. Kunsts.* XXX, 1909, cols. 197-203 (7 figs.), A. ERMAN publishes part of an Egyptian sketchbook recently acquired by the Berlin museum from Upper Egypt. The papyrus, which is broken into three pieces, is divided into small squares by red lines and the figures sketched in red or gray and then finished in black.

Among the drawings are a hawk-headed lion, a swallow, a rooster, a seated king, etc. The book belongs to a late, *i.e.* Greek period, and three hands may be recognized in it. It was probably the property of some shop where the drawings served as models for painters and sculptors.

An Old Persian Bronze.—In *Ber. Kunsts.* XXX, 1909, cols. 164-166

(fig.), L. MESSERSCHMIDT publishes a small Persian bronze in the Berlin museum representing the fore part of a reclining bull. Its resemblance to the bull capitals of Persepolis is striking. Examples of ancient Persian art are not numerous. This was probably attached to some piece of furniture as a foot.

A Phoenician Ornamental Axe.—In *Ber. Kunsts.* XXX, 1909, cols. 97-99 (fig.), L. MESSERSCHMIDT publishes a Phoenician axe in the Berlin museum (Fig. 3). It is shaped like a half ellipse with the usual hole for the haft and with two large holes in the blade. Ornamental lines run around the top of these holes, then join and extend in a straight line to the cutting edge, dividing the blade in two. On the hammer end are two small lions in the round facing each other over a victim. Such an axe is not practical and must have been made for purposes of decoration. The lion motive points to Syria as the place of its manufacture.



FIGURE 3. — PHOENICIAN AXE.

A Clazomenian Sarcophagus.—A terra-cotta sarcophagus of the usual tapering shape, now in the Royal Museums at Berlin, is described by R. ZAHN in *Jb. Arch. I.* XXIII, 1908, pp. 169-180 (3 figs.), and compared in all its details of decoration with other contemporary specimens already published. The peculiarity of the new one is in its having the light-on-dark technique for the decoration of the upper part and the dark-on-light for the lower part. The main picture shows a winged Athena between two dismounted horsemen who may be meant for the Dioscuri. Two centaurs are of the very old Silenus type with full human figure joined to the hind part of a horse.

A Campanian Crater.—In *Ber. Kunsts.* XXX, 1909, cols. 185-189 (fig.), R. ZAHN publishes a fine Campanian crater 0.57 m. high recently acquired by the Antiquarium in Berlin. It is black, with gilding about the lip, and adorned about the middle with a garland of vine leaves represented plastically and then gilded. The gilding on the black background produces the effect of a metal vase. It dates from the second half of the fourth century B.C.

A Portrait Head of Maximin.—In *Ber. Kunsts.* XXX, 1909, cols. 137-141 (fig.), H. WINNEFELD publishes a portrait head of the Roman emperor Maximin (235-238 A.D.) recently acquired by the Berlin museum. It is identified by coins and by a portrait head in Munich. Traces of paint are still to be seen on the eyes, hair, and beard.

Prehistoric Bronze Weapons from Canena.—In *Ber. Kunsts.* XXX, 1909, cols. 179-182 (2 figs.), H. SCHMIDT publishes two bronze weapons found a number of years ago at Canena, near Halle a. S., and lately acquired by the Berlin museum. One is a dagger of a type found in northern Italy

where it was probably made and exported to northern Europe. The other is a peculiar weapon consisting of a dagger attached at right angles to a handle of bronze (Fig. 4). The type probably originated in Spain. Both



FIGURE 4.—BRONZE WEAPON.

weapons belong to the oldest bronze period of northern Europe and therefore date from the beginning of the second millennium B.C. They are described also in *Z. Ethn.* XLI, 1909, pp. 125-127.

Objects of the La Tène Period from Hradischt.—In *Ber. Kunsts.* XXX, 1909, cols. 177-199 (3 figs.), SCHUCHHARDT publishes a number of objects from the collection of W. Osborne recently acquired by the Berlin museum. They all came from Hradischt in Bohemia and belong to the La Tène period of culture, dating from the first century B.C. They consist of iron tools, bronze fibulae and other ornaments, horn pins, and a black glazed, or light red and white painted pottery.

BONN.—**A Roman Portrait Head.**—In *Bonn. Jb.* 118, 1909, pp. 121-138 (2 pls.; 7 figs.), H. LEHNER publishes a portrait head of a Roman lady found two years ago at Schwarzhendorf and now in the museum at Bonn. It is life-size, of Parian marble, and probably dates from 200-240 A.D. Excavations carried on at the place where the head was found have revealed a few traces of the prehistoric period, but nothing of Roman date.

The head, therefore, probably came from Bonn and may have been the portrait of a Roman empress.

A Terra-cotta Portrait of a German.—In *Bonn. Jb.* 118, 1909, pp. 63-74 (pl.; 4 figs.), A. VON SALIS publishes a small terra-cotta portrait of a man, now in the museum at Bonn, which still retains most of its original color. It dates from the first century A.D., and the mode in which the hair is dressed shows that it represents a German.

GIESSEN.—**Neolithic Settlements.**—In the spring of 1908 a neolithic settlement was discovered near Leihgestern, 7 km. south of Giessen. Stone axes and other tools and quantities of potsherds, both decorated and undecorated, were found at a depth of from 0.50 m. to 1.20 m. below the surface. At another neolithic settlement already known 1 km. east of Giessen two tombs of the La Tène period were opened and in one of them a sword 88 cm. long was found together with an iron armlet, a bronze neck ring, etc. (*KRAMER, Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 33-36; 3 figs.)

GORNHAUSEN.—**A Glass Urn.**—Fragments of clear yellowish green glass were found at Gornhausen, which when put together made a nearly complete urn, about 30 cm. high. (*Röm.-Germ. Korrespondenzblatt*, II, 1909, p. 24.)

HEDDERNHEIM.—**Roman Amulets.**—In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 24-27, G. KROPATSCHEK describes two Roman amulets found before the north door of Nida, the Roman settlement at Heddernheim. One was a crescent-shaped pendant of silver, like the *lunula* of Plautus, *Epid.* 640. The other was a bronze phallus, inscribed with the word

puro, which Kropatscheck takes as equivalent to *puero*, comparing Varro, *L.L.* VII, 97. With these two amulets Kropatscheck compares the parts of a chain found at Treves, consisting of four *lunulae* and four phalli.

JENA. — **Acquisition of Late Roman Antiquities.** — First publication in full of antiquities found in a late Roman tomb at Dienstedt near Remda by G. EICHHORN in *Z. Ethn.* XL, 1908, pp. 902-914, describes fully, with illustrations, a peculiar neck-ring of silver wire, two thick rosette-like fibulae of conical shape, a cross-bow fibula, an amber necklace, bracelets of silver wire, a bronze pail with loose handle, a flat bowl of bronze, with three ring-handles, a bone needle, an iron knife with bone handle, and a number of small ornaments or bosses of silver or silver wire. The find, which remained for a time in the library in Weimar, is now in the museum of the University of Jena. The grave was of late provincial Roman times, the workmanship of the silver dating somewhere between 200 and 350 A.D.

MAINZ. — **Latin Inscriptions.** — In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 37-39, Körber publishes eight fragmentary Latin inscriptions recently found at Mainz. A considerable portion of the inscription, of which part was published *ibid.* I, p. 76, No. 4, was recovered in small pieces.

NEU STRELITZ. — **Report of Progress in the Rethra-Exploration.** — In *Z. Ethn.* XL, 1908, pp. 915-919, G. OESTEN tells of remains found beneath the waters of **Blankenburgsteich**: oak pillars, grooved or mortised and fastened with wooden pins, and a plank flooring covered with a mosaic of small stones. These a committee of the Anthropological Society of Berlin agree with the finder in regarding as relics of the stone age. In **Zippelower** and **Rosenholz** Oesten has found remains of military walls and gates, which he regards as the *Pagus Riederierum* of Thietmar and his *urbs quaedam Riedegost*. The **Fischerinsel** has been more fully investigated, including the structure near the shore, where charred wood, masses of burnt clay, stones split by the action of fire, parts of the skeleton of a horse, an iron buckle, pieces of sheet metal, etc., were found. The sub-structure of the island, formed of brush-wood and timbers, is described.

NYMWEGEN. — **A Roman Vase with Reliefs.** — In the *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 8-9, G. MESTWERDT describes a Roman vase with three medallions in relief which was found at Nymwegen. One of the medallions represents a quadriga, with the inscription *calos venete*, "well done, blue," *calos* being for *καλός*. Medallions on each side of this show a running dog and a leaping stag.

OBERADEN. — **Excavation of the Roman Camp.** — In the *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 1-8, G. KROPATSCHECK describes the excavation of the Roman camp at Oberaden (see *A.J.A.* XII, pp. 372, 478). The remains of pottery showed that the camp occupied the site of a German settlement, and these, with the coins which were unearthed, show that the camp was an early one of Drusus, not mentioned in our literary sources, and contemporary with the earliest remains at Haltern. The camp was shown to be octagonal in shape, and two more towers were located, as well as the praetorium.

OSNABRÜCK. — **Acquisition of Roman Coins.** — A number of Roman coins were recently found at Barenau, including a very rare gold coin of 16 A.C. They were taken to the museum at Osnabrück. (*Röm.-Germ. Korrespondenzblatt*, II, 1909, p. 10.)

POSERNA. — *Neolithic Graves.* — In *Z. Ethn.* XLI, 1909, pp. 120-123, A. GÖTZE describes two hill-graves (*Hügelgräber*) near Poserna (Weissenfels). A round or oval pit is carried deeper by digging a rectangular hole in the bottom of it, a board or plank perhaps originally covering this lower part. Flint implements, spiral ornaments (earrings?), amphorae of two sorts (*Schnuramphorae* and *Kugelamphorae*), a stone-axe, flint-chippings, and fragments of skeletons were found in these graves, which the writer refers to the Middle-German stone age.

ZABERN. — *A Gallo-Roman Necropolis.* — In breaking through a Roman wall to construct a street, a Gallo-Roman burial place was found with various small objects, coins, fibulae, etc. (*Röm.-Germ. Korrespondenzblatt.* II, 1909, p. 24.)

AUSTRIA-HUNGARY

EXCAVATIONS IN SOUTHERN ISTRIA. — In *Jh. Oest. Arch.* I, XI, 1909, Beiblatt, cols. 167-186, A. GNIRS publishes the more important results of excavations conducted in southern Istria in the spring of 1907. At **Val Catena** a small temple was found between the two temples already known, and 2.4 m. from the semicircular colonnade. North of this temple there are several rooms with a portico 150 m. long and 10 m. wide leading to a small building. Part of the entablature of the temple of Neptune was found. At **Monte Collisi** a small *villa rustica* in which oil was made came to light, and a number of short inscriptions, chiefly names stamped on tiles. At **Pola** a number of sepulchral fragments were discovered between the Porta Aurea and the Porta Ercole. Repairs to the Palazzo Municipale show that a considerable portion of the west wall of the temple is still well preserved. At the east end of the modern Foro the demolition of some houses revealed *exedrae* and niches, in one of which were fragments of a statue of a Roman emperor, perhaps Trajan, and a kneeling barbarian.

GORDUN. — *A Prehistoric Vase.* — In *Annals of Archaeology and Anthropology*, II, 1909, pp. 27-32 (pl.), A. M. WOODWARD publishes a prehistoric vase found in 1906 at Gordun, eighteen miles inland from Spalato. It is hand-made, and decorated with two bands of hatched triangles incised and filled in with white. The surface is burnished to a lustrous black. It probably dates from the end of the neolithic period.

GREAT BRITAIN

BARTON MOATS. — *A Late Celtic Settlement.* — In *Cl. R.* XXII, 1908, pp. 259-260 (pl.), F. G. WALKER describes a late Celtic settlement recently found at Barton Moats near Cambridge. In digging trial trenches through a large mound a ditch 110 feet long, 12 feet wide, and 5 feet deep was discovered almost full of black ash. This was composed of a mixture of burnt straw, seeds, bones of animals, potsherds, bronze and iron articles, some of which are Roman, including a horse-shoe, and other things. An earthen cooking pot still standing on its hearth of stones with burnt twigs under it was the most noteworthy single find. The trench was inhabited from about 100 B.C. to 100 A.D. by people living in wattle huts.

BRANSTON HALL. — *Bronze Celts.* — In *Proc. Soc. Ant.* XXII,

1908, pp. 3-5, there is a description by Sir JOHN EVANS of ten bronze celts from Branston Hall, four miles southeast of Lincoln. They were found in a gravel pit about two feet from the surface and are in an excellent state of preservation. Four of them are from the same mould.

BRASSINGTON.—**Exploration of the Harborough Rocks Cave.**

—In *Proc. Soc. Ant.* XXII, 1908, pp. 9-12, W. BEMROSE makes a brief report upon the exploration of the Harborough Rocks Cave about one mile from Brassington. The floor is uneven, with several deep pockets at the far end and one near the entrance. At the back the soil was about three feet deep and showed three floors. The finds consisted of pottery dating from Roman times and later, five brooches, several knives and small objects in bone and metal and a rudely cut gem probably representing Athena, armed with shield and spear, holding a Victory. Many bones of animals were also found. *Ibid.* pp. 129-135 (2 plans), W. S. FOX describes in detail the excavation of the cave. R. A. SMITH, *ibid.* pp. 135-145 (pl.; 2 figs.), discusses the objects found and concludes that the cave was used in the first and second centuries A.D., and perhaps two or three hundred years earlier, by people who were in touch with the pre-Roman civilization of Yorkshire.

CORBRIDGE.—**The Excavations of 1907.**—In *Proc. Soc. Ant.* XXII, 1908, pp. 300-302, F. HAVERFIELD summarizes the results of the excavations at Corbridge in 1907. The approach to the north end of the Roman bridge over the Tyne was uncovered; an extensive building provided with hypocausts, and probably a residence, was excavated on the top of a hill; near this, but of earlier date, was found a tank in which was a remarkable Romano-British relief representing a lion; and finally, on the hill-top, on both sides of a street, many buildings were excavated which yielded some inscriptions and many miscellaneous antiquities.

CORSTOPTUM.—**The Excavations of 1908.**—In *Cl. R.* XXIII, 1909, pp. 26-28, R. H. FORSTER reports upon the excavations at Corstoptum in 1908. On the north side of the broad street discovered in 1907, remains of two granaries were found nearly one hundred feet long from north to south and more than twenty feet wide. In the east granary several fragments of sculpture came to light, including a panel bearing a head with rays and a circular nimbus. Behind the left shoulder is a scourge. Some distance east of the granaries are the remains of a large building which was only partially excavated. On its west side, which is over 220 feet long, the wall still stands, in places to a height of four courses, built of large stones. From the inner face cross walls project eastward at intervals of about eighteen feet, forming a series of small courts which probably opened upon a large central court. West of the northern part of this structure was a small, rude building of late date in which forty-eight gold coins and a large gold ring were found wrapped in a piece of sheet lead. The coins, which are in fine condition, date from Valentinian I to Magnus Maximus, and were probably hidden about 385 A.D. Over one thousand coins in all have been found on the site, many of them showing traces of fire. Great quantities of pottery and many small bronzes were also found.

EDINBURGH.—**A Contract of the Fifth Year of Amenhotep IV.**

—In *S. Bibl. Arch.* XXX, 1908, pp. 272-275 (pl.), F. LL. GRIFFITH publishes a fragment of an Egyptian writing tablet owned by Mr. Moir Bryce, of Edinburgh, containing a contract for the hiring of a slave, and adds one

more to the rare group of "Bargains" published by Mr. Gardiner in *Z. Aeg. Sp. Alt.* 1906, p. 27.

ESSEX. — *Exploration of the Red Hills.* — In *Proc. Soc. Ant.* XXII, 1908, pp. 164-207 (6 plans; 12 pls.; 7 figs.), a report is made upon the exploration of the Red Hills during the years 1906 and 1907. H. WILMER points out that there are several hundred of these on the coast of Essex varying in size from a few rods to several acres, most of them under cultivation. They are low mounds, a few feet above the level of the surrounding marshes, composed of a mass of burnt earth and containing many roughly shaped pieces of burnt clay, some of which are a foot in length and from half an inch to an inch in thickness. The use to which they were put is at present unknown. Three mounds were opened at **Langenhoe**, and one at **Goldhanger**. The absence of domestic utensils proves that the mounds were not occupied. W. H. DALTON discusses the geological aspects of these mounds; J. H. B. JENKINS, the chemical character of some of the finds; E. T. NEWTON, the bones; A. H. LYELL, the plants identified in the charcoal; and F. W. READER, the pottery fragments. *Ibid.* pp. 207-214 (3 figs.), some late Celtic remains from the coast of Brittany resembling objects found in the Red Hills are published. The purpose of these mounds is not yet clear.

GODMANCHESTER. — *Discovery of Greek Coins.* — Two Greek coins, of the first and second centuries B.C., together with nine Roman coins, ranging in period from Domitian to Constantine II, were found in a small ancient burial-place in Godmanchester by F. G. WALKER, who records the discovery in *Num. Chron.* 1908, pp. 374-375 (2 figs.).

LANSDOWN. — *Recent Discoveries.* — In *Proc. Soc. Ant.* XXII, 1908, pp. 34-38 (5 pls.), T. S. BUSH reports upon the excavations at Lansdown, near Bath, 1905-08. Foundations of six buildings were brought to light, and many small objects of bronze and iron, as well as quantities of pottery. One rude British coin was found and 234 Roman coins, dating from the time of Antoninus Pius to the fifth century. There were also found four stone coffins containing skeletons, a number of human skulls and other bones, several flat disks of oolite, and a number of stone moulds.

MAUMBURY RINGS. — *A Roman Amphitheatre.* — H. S. GRAY reports that the excavations begun at Maumbury Rings prove that the place was a Roman amphitheatre. The hard chalk floor was covered with a gravelly substance, perhaps used for the surface of the arena. Roman pottery and other remains were found at this level. As yet no trace of seats for the accommodation of the spectators has been discovered. (E. J. FORSDYKE, *Cl. R.* XXIII, 1909, p. 60.)

OXFORD. — *Acquisitions of the Ashmolean Museum in 1908.* — In the *Report of the Keeper of the Ashmolean Museum for 1908*, the following acquisitions are announced: (1) Several specimens of Egyptian blue-glazed pottery of the eighteenth dynasty, representing "wasters" from a factory, spoiled by overheating. (2) A Mycenaean *onos* from Rhodes. (3) Bronze pins and fibulae, of the early Iron Age, from a tomb at Aegion. (4) A Tanagra figurine, representing an old woman bent with age. The features are taken from life. (5) A draped female figure in relief, holding a cornucopia, from a pale blue enamelled vase of Ptolemaic fabric. (6) A series of Roman vases of various provincial fabrics, from the collection of Sir John

Evans. One from Cologne is inscribed *bene bibi*. An interesting class consists of glazed, red-faced vessels, with incised plant designs. (7) Several implements of the Bronze Age, from Long Wittenham and from the Thames, near Wallingford.

PEVENSEY.—**Excavations at the Roman Fort.**—Excavations at the Roman fort at Pevensey, Sussex, have revealed a drain running through the north wall, and a well 4 feet square and 10 feet 6 inches deep, of Roman date. The coins and potsherds found belong to the fourth or third century A.D. (L. W. SALZMANN, *Proc. Soc. Ant. XXII*, 1908, pp. 151-153.)

RUTLAND.—**Miscellaneous Discoveries.**—In *Proc. Soc. Ant. XXII*, 1908, pp. 46-56 (2 pls.; fig.), V. B. CROWTHER-BEYNON reports upon the discoveries in Rutland since 1903. There have been found at **Oakham** a number of worked flints and scrapers, and at **Great Casterton** a skeleton of the prehistoric period. At **Cottesmore** a hoard of objects of the Bronze Age was discovered, including two socketed celts and parts of two others, a socketed spear head, three gouges, a chisel, and part of a sword blade. At **Market Overton** a Roman pottery kiln was found, together with many broken vessels and miscellaneous small objects. Many Anglo-Saxon remains came to light here, among them a water clock, and objects of mediaeval date were found in various places.

SPROUGHTON.—**A Bronze Age Dagger Blade.**—In *Proc. Soc. Ant. XXII*, 1908, pp. 86-88 (fig.), C. H. READ publishes a dagger blade, 9½ inches long, from Sproughton, Ipswich. It is a fine specimen, dating from the Bronze Age. He also publishes a bronze torc from the Thames.

AFRICA

CARTHAGE.—**Excavations on the Hill of Bordj-Djedid.**—The excavations carried on in 1908 on the south side of the hill of Bordj-Djedid, Carthage, have yielded interesting results. At the foot of the hill a semi-circular construction, 40 m. in diameter, was found, corresponding to an aqueduct of similar shape. Back of this were considerable remains of baths, in which fragments of an inscription in honor of the emperors Crispus, Licinius, and Constantine were discovered. Lower down were Carthaginian graves, most of which had been opened in Roman times. The burial chamber was at the foot of a shaft, and the bodies were burnt and enclosed in wooden coffins. The objects found in the tombs, small vases, lamps, etc., were of no particular value. In one grave was a silver plate, 4 cm. × 3.2 cm., engraved with figures common in Egyptian art. These tombs in date occupy a middle place between those of Douimes and Sainte-Monique. During the excavations an important deposit of Roman lamps was found, many of them of unusual shape and decoration. (Father DELATTRE, *C. R. Acad. Insc.* 1908, pp. 592-601; 5 figs.)

Lead Seals.—In *B. Soc. Ant. Fr.* 1908, pp. 219-220, 222-223, P. MONCEAU publishes three inscribed lead *bullae* found at Carthage, and interesting as showing the method by which they were attached to the string. Two of them consist of a single disk of lead, with a hole running through it transversely. The other consists of two disks soldered together, with the string between them. Other lead seals from Carthage are published by the same author, *ibid.* pp. 242, 288, 299, 306-307, and 363-365; and still

another by A. HÉRON DE VILLEFOSSE, *ibid.* pp. 330-331. All of them were communicated by Father Delattre.

MAHDIA.—**Recovery of Objects from the Sea.**—The latest efforts to recover the objects discovered by sponge divers in the sea near Mahdia (*A.J.A.* XIII, pp. 102-103) are reported upon by A. MERLIN in *C. R. Acad. Insc.* 1908, pp. 532-541 (fig.). There are about sixty Ionic and Corinthian columns, about 5 m. high and 0.70 m. in diameter, carefully piled in ten rows just as they were aboard ship. Capitals and other blocks were placed between them. None of the columns have been brought to the surface as yet. Pieces of the ship were found, some minor objects of bronze, and many broken amphorae; also parts of at least three large marble vases adorned with figures carved in relief, similar to the so-called Borghese vase in the Louvre. The ship was about 30 m. long and 7 or 8 m. wide, and no doubt sank from overloading.

TUNIS.—**New Latin Inscriptions.**—In *C. R. Acad. Insc.* 1909, pp. 91-101 (fig.), A. MERLIN publishes four Latin inscriptions recently found in Tunis. At **Medeina**, the ancient Althiburos, the forum measuring 37 m. by 45 m. was surrounded by a colonnade. Within this stood statues, most of the bases of which are preserved. One here published records the setting up of a Marsyas. Two inscriptions found between **Kasrin** (Cillium) and **Feriana** (Thelepte) prove that the tribe Musuni mentioned by Pliny lived in that region; and that the abbreviation *Gens Mus. Reg.* stands for *gens Mus(uniorum) Reg(ianorum)*. Another found at **Siaoun** in the extreme south of Tunis shows that in 198 A.D. a fortified camp was established at that spot by Septimius Severus as a protection against the Garamantes.

UNITED STATES

BOSTON.—**Recent Acquisitions by the Museum of Fine Arts.**—The *Thirty-third Annual Report* of the Boston Museum of Fine Arts announces the following acquisitions: (1) Six fragments of an archaic grave stele of a youth from Boeotia. The three larger fragments contain (a) the head and left fore-arm; (b) the waist and the legs to the knees; (c) the right hand. "Representation in flat relief of a nude youth in profile to right, his left leg forward. His right hand, slightly advanced and raised, holds an aryballos by a strap; his left hand is raised to the level of his head and holds up a branch with two pomegranates. On his head is an olive wreath; below this the hair is arranged in four spiral curls. The nose and chin are injured. On the aryballos are traces of decoration in relief,—a tongue pattern on the shoulder, and a lotos chain." Above the head are two letters of an inscription. (2) A torso of a man, 0.20 m. high, of Graeco-Roman style. (3) Four bronze statuettes, one of Graeco-Roman date representing Nike advancing, with floating drapery. In her raised right hand she carries a wreath, in her left a cornucopia. (4) An Etruscan mirror similar to that in Gerhard, *Etr. Spiegel*, I, Pl. LXXXIII. (5) Seven Greek vases including the fine hydria published by J. C. Hoppin (*Harvard Studies in Classical Philology*, XII, pp. 335 ff.). (6) Ten Lower Italian and Etruscan vases. (7) Thirty-one coins, of which three are gold and the rest silver. (8) A number of miscellaneous objects of terra-cotta, glass, and stucco.

NEW YORK. — Acquisitions of the Metropolitan Museum. — The acquisitions of the Metropolitan Museum in 1908 consist of ten marbles, seventeen bronzes, fifteen vases, nine statuettes and other objects of terracotta and seven objects of gold and silver. The most important sculptures are a fragment of a fighting Gaul of the Pergamene school; two Greek grave stelae of the best period; a small broken figure, 39 cm. high, perhaps Zeus, probably from a pediment (Fig. 5); a small head of a youth of the fourth century from Tarentum; a replica of the head and shoulders of the "Dresden Satyr"; a small bearded head; a head of Augustus; and two other Roman portrait heads, one of the republican period and the other of the second century A.D. The bronzes include two fine Greek statuettes of the middle of the fifth century B.C.; three archaic Greek statuettes; a larger



FIGURE 5. — FRAGMENT OF SCULPTURE (ZEUS?).

statuette of Hermes, and various utensils. The finest of the vases is a large crater of about 460 B.C., still intact. Four well preserved white lecythi and three exceptionally fine moulds for Arretine vases were also acquired. The objects of precious metal include a large scyphus, two cylices, a jug and a wine ladle, all of silver; and a very beautiful gold earring of fifth century workmanship representing a siren with her head surmounted with a large floral ornament playing upon a lyre. (E. R., *B. Metr. Mus.* IV, 1909, pp. 44-45; also G. M. A. R. *ibid.* pp. 62-65; 6 figs.) The bronzes are described by E. R. *ibid.* pp. 77-81 (6 figs.). They consist of a statuette of a youth 29.8 cm. high of the transition period (published in the catalogue of the Burlington Fine Arts Club exhibition, Pl. LIII); a statuette 14.8 cm. high of an athlete, perhaps a jumper (published *ibid.* p. 46); three small statuettes of the first half of the sixth century, one of which came from Andritzana and represents a peasant (published in *Ath. Mitt.* 1905, pp. 65 ff.); a Hermes of the Graeco-Roman period; two helmets, one Greek, the other perhaps Gallic; an archaic

ladle of beautiful design; a candelabrum; a Greek cylix of the fourth century; two attachments for a pail of the sixth century; the handle of a jug with the head of Heracles; the hoof of a horse from a Roman equestrian statue; and an overornate chair leg of imperial date. Among the fifteen Greek vases acquired there are seven white lecythi, two of which are black-figured; a large crater decorated above with scenes from the lower world, and below with the punishment of Tityus by Apollo and Artemis, and a combat between Zeus and Hermes and a satyr; a red-figured peleke in the style of Midias; an olpe with the representation of a man worshipping a statue of Athena; and an oenochoe with the return of Hephaestus (G. M. A. R., *B. Metr. Mus.* IV, 1909, pp. 101-105; 8 figs.). The Cesnola collection of antiquities from Cyprus is to be rearranged and catalogued by J. L. Myres (*ibid.* pp. 95-96; fig.).

EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART

GENERAL AND MISCELLANEOUS

EGYPT. — LUXOR. — **The Prayer for the Dead in Christian Nubia.** — SEYMOUR DE RICCI in *C. R. Acad. Insc.* 1909, pp. 144-165, communicates to the Academy a series of letters, in one of which he announces the acquisition of a Nubian epitaph, in Greek, dating 1181 A.D., and containing the prayer for the dead in use in the Nubian church, and practically identical with that of the modern Greek church. This is the seventh of these epitaphs with the prayer which have been discovered. The writer gives the comparative text of all seven and expresses the opinion that none of the inscriptions are earlier than 960, in spite of the early dates hitherto given them. The latest in date is the one just discovered, which is, moreover, probably the latest Greek inscription hitherto found in Egypt.

WAD-EL-HADAD. — **Christian Remains.** — An interesting discovery of Christian remains has recently been made at Wad-el-Hadad, a few miles north of Sennar, on the Blue Nile. A number of skeletons were found together with pottery consisting chiefly of jars and bowls of dark clay decorated with Nubian patterns. On one of the bowls is a Coptic processional cross, which also occurs scratched inside the lips of the jars, where it is associated with two other Christian emblems, the fish and the palm branch. This pottery, which dates from the seventh or eighth century A.D., has been sent to the museum at Khartum. This is the first time that Christian remains have been found so far south. (*Nation*, January 14, 1909, p. 48.)

MESOPOTAMIA. — RUSABA. — **Description of the City's Ruins.** — Rusafa, in the old route from Sura to Palmyra, was visited in 1907-08 by F. Saare, who describes the ruins in *Monatshefte f. Kunstwiss.* II, 1909, pp. 95-107. The walls make a trapezoid of about 350 m. × 250 m. in extent, and all the important buildings are within them, save a small church of central plan outside the north gate. This had tunnel vaults over the arms of its cruciform plan, domes over the squares at the corners, and probably a wooden dome over the central square. Each side of the city walls has a portal. The walls have towers at intervals on the exterior, and on the interior an engaged colonnade with archivolts. The basilica dedicated to St. Sergius,

whose martyrdom here gave the town its later name of Sergiopolis, originally had three wide arches in the nave arcade, which were later divided by the introduction of intermediate columns. The basilica has side entrances in the north aisle, and a windowed apse. There was no mosaic in the apse but a stucco ornament like that found by Strzygowski in the convent of Sohag in Upper Egypt. The martyr's tomb was doubtless in the second church within the walls, a central structure of very peculiar plan (Fig. 6).

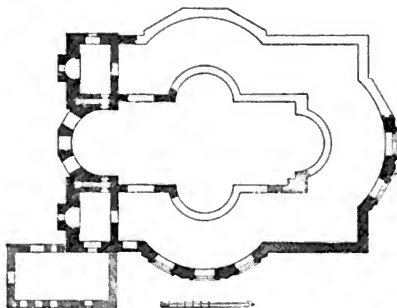


FIGURE 6. — PLAN OF CHURCH AT RUSAFA.

The date of these monuments is placed by Saare in 491-501; the reconstructions and the church outside the north gate in the sixth or seventh century.

TURKEY. — SALONICA. — Byzantine Mosaics. — The Russian Archaeological Institute has issued a report of its investigations of Byzantine churches at Salonica in 1907 and 1908. In the churches of St. Demetrius, St. Sophia, and St. George remains were found which make Salonica second only to Ravenna as a treasury of Byzantine art. Repairs to St. Demetrius enabled Upensky to examine the mosaics (see *A. J. A.* XIII, p. 105). The patron saint appears about a dozen times in various postures. In one case he is standing in a bell-shaped niche, wearing a white robe bordered with gold and decorated with a large band. Near by are three persons: in the centre St. Demetrius; on the right the Illyrian praefect Leontius; and on the left Bishop Eusebius. Icons of the Virgin appear in many places resembling the most ancient extant representations, such as that in the church of Kittì, near Larnaca in Cyprus. The church of St. Demetrius was partially destroyed by fire in the seventh century, and most of the new mosaics date from the time of the rebuilding. The characteristic feature of the mosaics is their realism. The scenes are taken from actual life, and are devoid of mystic or symbolical influence. Blue is the prevailing color of the backgrounds; and silver is always used for the nimbus. (*Nation*, May 27, 1909, pp. 544-545.)

ITALY

NEW WORKS OF ART. — *Riv. d' Arte*, 1909, pp. 45-54, publishes for the first time three works of art, over the initials of G. Poggi and the name of O. H. GIGLIOLI. The first is a tapestry representing the Last Supper, owned by the *Confraternità del Sacramento*, in Camaiore, near Viareggio. It belongs to the early sixteenth century. The next is the *dossale* of an altar in S. Romolo at Bivigliano, with figures of the Madonna and Saints in the main panel and Christ with Saints, in half figure, in the predella. The figures are white on a blue ground. Giglioli assigns the work to Andrea della Robbia and assistants, and dates it about 1490, a date confirmed by documents which show that the *dossale* was in the church in 1494. The third work published is a Madonna, by Agostino di Duccio, in the church of S. Francesco at Pontremoli. *Ibid.* pp. 128-135, are published the following works: a modern St. John Baptist in S. Romolo at Bivigliano; an almost forgotten Annunciation, with a predella, by Fra Angelico, in the church of S. Francesco di Montecarlo in S. Giovanni Valdarno; a Madonna, by Andrea della Robbia, in the church of S. Iacopo a Castro at Firenzuola; and a St. Sebastian, by Baccio da Montelupo, in the abbey of S. Godenzo.

WORKS OF ART IN THE ABRUZZI. — A series of notes by P. PICCIRILLI in *L'Arte*, 1909, pp. 69-75, calls attention to several monuments hitherto practically unknown. In the lunette of the lateral doorway of the church of S. Francesco della Scarpa in Sulmona, is a fresco representing the Madonna between St. Francis and the Magdalen, a good quattrocento work assigned to the local painter, Mastro Giovanni. The terra-cotta Madonna of the church of S. Maria della Tomba, in the same town, is an imported work, by some Tuscan sculptor of the latter half of the sixteenth century. At Scauno the parish church contains an interesting group of four saints, painted on the doors of a niche, with the date 1507. The style is like that of Lo Spagna. The rest of Piccirilli's notes are devoted to pieces of goldsmith's work preserved in the treasury of S. Pietro at S. Pietro Avellana.

BOLOGNA. — **The Authorship of an Assumption Proved.** — The Assumption in St. Martin's at Bologna was once assigned to Perugino, then by Morelli to Costa, later by Ricci and Venturi to Chiodarolo, by Berenson to Costa, at least in part. F. MALAGUZZI VALERI, in *Rass. d' Arte*, 1909, p. 60, publishes a note given in 1506 by the prior of this convent to Costa, on account of a painting, which must have been the Assumption.

FIESOLE. — **New Frescoes.** — In a chapel on the estate of the convent of S. Gerolamo at Fiesole are some frescoes in a very bad state of preservation, but of considerable interest, an account of which is given in *Burl. Mag.* XV, 1909, pp. 180-186, by EMILY H. STEPHENS. The frescoes consist of an Annunciation over the entrance, a remarkable Pietà on the right wall, and a large Christ and Saints in the apse. Miss Stephens suggests a date about 1360, and calls the compositions Giottesque, with Siennese types and feeling.

FLORENCE. — **A New Giotto.** — A. CHIAPELLI, in *Rass. d' Arte*, 1909, pp. 71-73, describes the fresco recently discovered in a tabernacle on the corner of Via del Leone and Via della Chiesa, which had been closed for centuries (Fig. 7). It represents the Madonna enthroned between angels and saints, and closely enough resembles Giotto's known works to permit of attribution to him.

A "Noli Me Tangere" in the Uffizi. — There is in the Uffizi gallery a picture by the Venetian Battista Franco, court painter for a brief period of Cosimo I, and an indefatigable imitator of Michelangelo. It is very probable that he used for it the cartoon of Buonarroti which Vasari says was "colored" by Bronzino, and that we have in it a free copy of Michelangelo's composition. (C. GAMBA, *Boll. Arte*, III, 1909, pp. 148-151.)

An Uffizi Drawing. — E. JACOBSEN finds in a drawing of the Uffizi (Cornice 26, No. 379) representing a draped standing figure of a youth, the study for the St. Sebastian in a group at the Municipal Museum of Nantes, a picture which was recognized some time ago as a work of Fiorenzo di Lorenzo by F. Mason Perkins. (*Rass. d' Arte*, 1909, p. 73.)

Portraits in Benozzo's "Procession." — Of the three Cavaliers in Benozzo Gozzoli's "Procession of the Magi" who are ranged near Piero de' Medici on the right wall of the Riccardi Chapel, one has unmistakably the features of Sigismondo Malatesta. The one next him is probably Galeazzo Maria Sforza, inasmuch as the procession is without doubt a reflection of the festivities given in his honor in 1459 by Cosimo and Piero de' Medici. (G. MESNIL, *Rass. d' Arte*, 1909, pp. 74-75.)

INVORIO. — The Ducal Portraits. — In *Rass. d' Arte*, 1909, pp. 51-54, A. MASSARA gives an account of the Castello Visconti at Inverio and particularly discusses the frieze of medallion portraits which ornaments the loggia. These medallions are six in number and represent the six most famous dukes of Milan belonging to the Visconti and Sforza families: Gian



FIGURE 7. — A NEW GIOTTINO.

Galeazzo and Filippo Visconti; Francesco, Gian Galeazzo, Galeazzo Maria, and Ludovico Sforza. There seems a possibility that Bramante designed the frescoes, but they were executed by an inferior hand.

MESSINA. — *The Works of Art Lost in the Earthquake.* — Besides a short résumé of the architectural monuments ruined in the destruction of Messina, *Rass. d'Arte*, 1909, pp. 25-30, contains an article by G. FUZZONI on the chief paintings and sculptures which have been lost. Of these the most important are works of Antonello da Messina in the Museo Civico, the "Madonna of the Rosary," and four pieces of a triptych, with saints, and an Annunciation; the Madonna in majolica, by Andrea della Robbia, which adorned the left wall of S. Maria della Scala; an Assumption by Salvo di Antonio, which was kept in the sacristy of the cathedral; and a polychrome statue of the Madonna by Francesco Laurana in Sant' Agostino. A more detailed list is found *ibid.* p. 47. *Chron. Arts*, 1909, pp. 20 and 67, announces that the Antonello triptych is unharmed save for damages to the wings. Three Flemish paintings in the museum have been recovered. Seventy-four of the vases made in 1568 at Urbino and Faenza for the *Farmacia* and *Ospedale*, the cathedral treasure, and all the Greek manuscripts and the incunabula of the library are also safe.

PALADONE. — *New Frescoes by Domenico Morone.* — A number of frescoes by Domenico Morone in the little church of S. Nicola da Tolentino at Paladone in Valpolicella are published by L. SIMEONI in *Madonna Verona*, 1909, pp. 67-71. They consist of two series of saints on either side of the altar, both series signed with the artist's name. Certain peculiarities heretofore considered characteristic only of Francesco Morone, Domenico's son, appear in these works, showing that a new examination of Francesco's *oeuvre* is needed, to see if some of his paintings are not rather the work of Domenico. Simeoni also points out that there is documentary evidence to show that Domenico did not die about 1508, as assumed by Bernasconi, but was still alive in 1517.

PISA. — *The Sculptures of S. Michele degli Scalzi.* — The sculptured ornament of the main portal of the church of S. Michele degli Scalzi, consisting of a half-figure of Christ in the tympanum with nine half-figures, representing the angelic hierarchies, distributed along the lintel, are published for the first time in *Riv. d'Arte*, 1909, pp. 9-18, by G. POGGI. These sculptures are dated 1204, and by reason of their obvious derivatives from the sculptures of the Baptistery, they give a *terminus ante quem* for the dating of the latter.

POASCO. — *A Fresco by Luini?* — In *Rass. d'Arte*, 1909, p. 16, D. SANT' AMBROGIO publishes a Sant' Apollonia frescoed on a pilaster in the church at Poasco, near the abbey of Chiaravalle, and dated 1515. It is by the same hand that executed the St. Clement on the opposite pilaster, which was discovered in 1902. The writer suggests that the painter was Luini, and that these frescoes were part of the works ordered by the monks of Chiaravalle, to whom the Poasco church at that time belonged.

RAPALLO. — *Unknown Pictures.* — G. FRIZZONI publishes in *L'Arte*, 1909, pp. 89-93, a Crucifixion by Van Dyck which exists in the little church of S. Michele near Rapallo, evidently a product of Van Dyck's sojourn at the neighboring Genoa. In the church of S. Francesco in Rapallo itself is a seventeenth century Miracle of St. Anthony of Padua, which tradition assigns to Luciano Borzone.

ROME. — **The Lateran Account-books of the Fifteenth Century.** — The list of expenditures of the Lateran from 1432 to 1498 are published in *Boll. Arte*, III, 1909, pp. 19–53, by G. DE NICOLA, together with indexes of the works of art and artists mentioned. Included in the article is a history and description of the Lateran treasure proper, as distinguished from that of the Sancta Sanctorum and the papal treasure deposited in the Lateran. The most interesting of the objects in this treasure are the casket of gilded bronze containing the tunic of St. John Evangelist, with reliefs of the twelfth century; a Limoges casket with the relics of S. Barbara; and the tabernacle containing the hair-cloth of the Magdalen, which is a Renaissance copy of the miniature Temple of Vesta figured in reliefs in the Uffizi and the Lateran itself.

A New Portrait of Macrino d' Alba. — G. B. ROSSI publishes in *Burl. Mag.* XV, 1909, pp. 113–114, a portrait in the possession of Mr. Alexander Imbert at Rome, which bears the inscription: *Macrini manu, post fata vivam*, and is further shown to be an auto-portrait of the artist by comparison with the youthful likeness in the collection of Sig. Alfeo Chiaffrino at Bra. The writer adds that the artist's name is properly Macrino d' Alladio, there being no authority for "d' Alba."

SIENNA. — **A Madonna by Domenico di Bartolo.** — F. MASON PERKINS, in *Ross. d' Arte Sienese*, 1909, pp. 22–25, attributes, on stylistic grounds, the Praying Virgin in the Chiesa del Refugio in Sienna to Domenico di Bartolo.

SPOLETO. — **The Death of Lo Spagna.** — U. GNOLI, having deciphered the inscription on Lo Spagna's frescoes in the little church near the castle of Eggi at Spoleto, finds in it the date 1532. This proves that the painter died between 1532 and 1533, not between 1528 and 1530, as hitherto supposed. (*Boll. Arte*, III, 1909, pp. 13–18.)

VERONA. — **New Data on Veronese Artists.** — G. GEROLA, writing in *Madonna Verona*, 1909, pp. 24–45, shows from documentary evidence that Liberale da Verona was born about 1445 and died at some time between 1525 and 1529. The writer also comments upon the Giolfino family, and shows that only one of the name, Niccolò di Niccolò Giolfino, was a painter. The date 1486 upon the Pentecost in S. Maria della Scala at Verona is declared a forgery, and thus the objection to assigning it to the younger Niccolò (born in 1476) is removed.

SPAIN

SARAGOSSA. — **French and Flemish Art at the Exposition.** — E. BERTAUX describes in *Gaz. B.-A.* XLI, 1909, pp. 85–105, the most interesting pieces of French art which appeared in the exposition held at Saragossa in 1908. Among the most important pieces discussed is the "Virgen de la Vega," a wooden Madonna plated with gilded silver and set with jewels and enamels. It forms part of the treasure of the cathedral of Salamanca, and is a work of the Limoges school of about 1200. Another work of considerable importance is a painting on wood from the treasure of Pampeluña cathedral. It represents a crucifixion, and introduces prophets and church-fathers into the scene in Gothic fashion, but differs materially from the ordinary Gothic iconography. *Ibid.* pp. 219–239, the same writer

describes some of the tapestries which were taken from their hiding-places in the two cathedrals of Saragossa and displayed at the exposition. One of these is a Glory of the Virgin, done in Brussels at the beginning of the sixteenth century, which departs from custom in using the Samaritan Woman and the Adulteress in the subordinate panels, instead of Esther and Bathsheba, who usually accompany a Glory of the Virgin. An incomplete series of tapestries illustrates the story of Geoffrey of Monmouth, which recounts the voyage of Brutus, grandson of Aeneas and eponymous hero of Britain. This is Flemish weaving of about 1460. Another tapestry of about the same date is devoted to the History of the Cross. A History of Jephthah seems to belong to the school of Picardy, from the dialect used in the inscriptions, and dates about 1470. The earliest piece exhibited was a Passion, which cannot be much later than 1400, and is of Northern French or Flemish origin.

SILOS. — *Sculptures in the Abbey.* — E. ROULIN, in *R. Art Chrét.* 1909, pp. 1-10, catalogues the works of sculpture existing in the abbey-church at Silos, some of them hitherto unpublished. The most interesting are: a statue of the Madonna, which he assigns to the thirteenth century; a St. Anne, Virgin, and Child, a stone group of the fourteenth century; and a relief representing St. Dominic delivering prisoners, of the thirteenth century. *Ibid.* pp. 75-79 and 166-174, appears an account of the cloisters of this abbey by the same writer, to be continued in later issues of the *Revue*.

FRANCE

A MADONNA OF THE FOURTEENTH CENTURY. — A small Virgin and Child in stone, recently sold for exportation to the United States, is described by H. CHABEUF in *R. Art Chrét.* 1909, pp. 143-145. He assigns it to Burgundy, and believes that it came originally from Pontailleur-sur-Saône, Côte d'Or.

DIJON. — *Acquisitions of the Museum.* — The following objects have recently been added to the collection in the museum at Dijon: a Saints Cosmas and Damian, of the Spanish school of the fifteenth century; a Pieta by a Burgundian sculptor of the sixteenth century, a work recently discovered in a private house in Dijon; and an altar-piece of the end of the fifteenth century, containing Passion-scenes. (*Chron. Arts*, 1909, pp. 126-134.)

PARIS. — *The Gay Collection at the Louvre.* — The Gay Collection at the Louvre is described in *Gaz. B.-A.* XLI, 1909, pp. 409-432, by G. MIRON. The most interesting pieces are a Flemish Madonna of the fifteenth century; an angel forming part of an altar-piece, by Fra Angelico; a marble statuette of an angel belonging to one of the Tuscan schools of the thirteenth century; a Virgin of the Annunciation, Pisan of the fourteenth century; an ivory plaque containing the figure of a saint, of the fifth or sixth century; a curious "king" belonging to a chess-set in bone, of the German school of the twelfth century; two bronze plaques of Irish workmanship; a Rhenish *champlevé* of the twelfth century representing a scene of Ezekiel's vision; another *champlevé* and a crucifix of Limoges workmanship, signed "Johannis Garuerius," and dating from the twelfth century.

HOLLAND

SCHEVENINGEN. — **A New Jan Mostaert.** — E. WEISS publishes in *Z. Bild. K. N. F. XX*, 1909, pp. 215-217, a curious landscape which is probably the unfinished West Indian landscape mentioned by Karel van Mander among the artist's works. The picture is in the van Stolk collection at Scheveningen.

GERMANY

BERLIN. — **Acquisitions of the Museum.** — The Picture Gallery at Berlin has recently acquired a triptych by Herri met de Bles (?) representing the Descent from the Cross in the middle panel, the Holy Family and St. Francis in the wings (*Ber. Kunsts. XXX*, 1909, col. 110) and a Baptism of Christ begun by Dirk Bouts and finished by a pupil of Ugo van der Goes (described by FRIEDLÄNDER, *ibid.* cols. 209-212). The Museum of Christian Sculpture has received: the stone figure of a kneeling angel, Bavarian of the early fifteenth century (*ibid.* col. 310); three fragments of early Christian sarcophagi from Rome, of the fourth century; an early Byzantine capital from Saloniki, of the fourth or fifth century; an early Christian marble reliquary in the form of a sarcophagus, from Asia Minor, dating from the sixth to the seventh century; two early Christian bronze *ampullae* with incised figures, one Roman of the fourth or fifth century, the other Egyptian of the fifth or sixth century; a Lombard breast-plate of the ninth or tenth century; and a Romanesque portrait head, imitating the antique, from Rome, dating in the thirteenth century (*ibid.* col. 206). The *Kupferstich-kabinett* has acquired Luini's cartoon for the Europa frescoes in the Picture Gallery (described by Bock, *ibid.* cols. 215-220). The *Kunstgewerbe Museum* has acquired a bookbinding of Catherine de' Medici (described by LOUBIER, *ibid.* cols. 102-106); a silver and crystal ewer executed from the design of Holbein the younger (described by FALKE, *ibid.* cols. 125-127); a wooden Sacrament tabernacle with reliefs of the Resurrection and angels, Umbrian, of the end of the fifteenth century (described by FALKE, *ibid.* cols. 141-142); a faience plate with the Nativity painted upon it, and an oven-tile in polychrome relief, with the Cana wedding, — both South German of the sixteenth century (described by FALKE, *ibid.* cols. 166-171).

COLOGNE. — **A Forgery in the Museum.** — In consequence of Poppelreuter's articles in *Z. Bild. K.*, the Madonna in the Cologne museum, attributed to Master William, has been thoroughly examined by Braun, director of the Munich Gallery, and Voll, director of the Cologne museum. The former recognizes modern portions in the picture, the latter pronounces the whole work a forgery of the nineteenth century. The question will be submitted to a commission of experts. (*Chron. Arts*, 1909, p. 150.)

RUSSIA

KALISCH. — **A New Rubens.** — A Descent from the Cross in one of the churches of Kalisch, Poland, has been recognized and proved by documentary evidence to be the work of Rubens. (A. BRYKCYNSKI, *R. Art Chré.* 1909, pp. 30-31.)

ST. PETERSBURG. — **New Pictures at the Hermitage.** — G. FRIZ-

zoni, in *Rass. d' Arte*, 1909, pp. 2-3, describes two recent acquisitions of the Hermitage Gallery, consisting of a Madonna by Girolamo Romanino and two wings of an altarpiece representing a mystic conception of Heaven, by Hans Luess von Kulmbach.

Pictures in Private Collections. — A loan exhibition held in St. Petersburg in November and December, 1908, brought forth the élite of the old masters in private possession. These are described by J. v. SCHMIDT in *Monatshefte f. Kunstwiss.* II, 1909, pp. 161-197. The following are reproduced: a Madonna ascribed to Lippo Memmi; an Annunciation by Raffaelino del Garbo or Filippino Lippi; a North Italian Pietà of the quattrocento; a St. Sebastian by Perugino; a Portrait of a Lady by Piero di Cosimo (?); a Madonna ascribed to Leonardo; a Portrait of an Old Man by G. B. Tiepolo; a Spanish triptych, the Crucifixion, of the sixteenth century; a diptych, Adoration of the Magi, by a Bruges master of about 1490; a Flight into Egypt by Jordaens; a Portrait of a Gentleman ascribed to Pieter Franchois; a marine by Andries von Eertveldt; a portrait study by Rembrandt; the Mocking of Christ by N. Maes (?); a Portrait of a Boy by some Dutch master of the seventeenth century; a Skating Scene by Ant. v. d. Neer; Achilles and the River-gods by C. A. Coypel; Pygmalion and Galatea by Boucher; Concert in the Palais Royal by Taunay; a Meeting of Joachim and Anna by a South German master of about 1450; Frau Loder by F. A. Tischbein; and Mme. Skobejew by Wladimir Borowikowski.

GREAT BRITAIN

TWO PERSIAN PORTRAITS. — F. R. MARTIN publishes in *Burl. Mag.* XV, 1909, pp. 4-8, two portraits in his possession by Behzad (ca. 1475), the greatest of the Persian painters. They formed part of the album in which was found Gentile Bellini's portrait of a Turkish prince (see *A. J. A.* 1906, p. 366). One, in colors, is the likeness, so the inscription tells us, of a "dervish from Bagdad"; the other is a sketch in pencil for the portrait of the Sultan Husein Mirza.

LONDON. — **A New Rembrandt.** — On February 18, 1909, there was sold in London, under the name of Eeckhout, a panel, 10½ inches × 15 inches, entitled David with the Head of Goliath. It has since been recognized as an early work of Rembrandt. It bears the monogram R. H. and a date which seems to be 1631, although on stylistic grounds the picture might be assigned to 1629-30. The brush-work is similar to, but freer than, that of the Money-changer, now in the Berlin museum. The picture was one of a small private collection in Hampshire (*Athen.* April 10, 1909, p. 445). In *Burl. Mag.* XV, 1909, pp. 71-72, C. PHILLIPS reports that Holmes reads the inscription "R. L. (i.e. Rembrandt Leydensis) 1627."

RICHMOND. — **Panel in the Cook Collection.** — In *Burl. Mag.* XV, 1909, pp. 107-108, W. SUIDA publishes a panel in the collection of Sir Frederick Cook at Richmond which he assigns to Conrad Witz. On one side is represented a heavily draped figure, possibly a prophet, and certainly the pendant to another figure on a second panel, now lost. On the back is the kneeling figure of the Magdalen, part of a *Noli Me Tangere* group. *Ibid.* pp. 173-174, G. HULIN DE LOO and HERBERT COOK assign the panel to a Burgundian master, on the ground of the close resemblance of the Magdalen to the angel in the Annunciation at Aix.

SHREWSBURY.—**The Concert at Asolo.**—H. Cook publishes in *Burl. Mag.* XV, 1909, pp. 38-43, a *fête champêtre* which is in the collection of Lord Bronick at Attingham Hall, near Shrewsbury (Fig. 8). It represents eight young courtiers, some with musical instruments, grouped around a lady,



FIGURE 8.—PAINTING AT ATTINGHAM HALL.

whom Cook identifies with Catherine Cornaro, queen of Cyprus, regarding the scene as an ideal portrait of that lady's court at Asolo. The figure standing behind the queen he calls Giorgione, and believes that the picture is an eighteenth-century replica of an original by that master.

AFRICA

MILIANA.—**A Christian Epitaph.**—In *B. Soc. Ant. Fr.* 1908, p. 291, P. MONCEAUX publishes a Christian epitaph found at Miliana, Algeria, and dated in the year 314. It is the first Christian inscription on this site and is evidence for the presence of Christians in the interior of Mauretania at the beginning of the fourth century.

UNITED STATES

BOSTON.—**An Acquisition of the Museum.**—By the gift of Mrs. John H. Wright, the Museum of Fine Arts has become the possessor of a large Flemish tapestry dating from the second half of the fifteenth century. It is divided by jewelled columns into four panels, in the first of which is represented the Creation of Eve, in the second the Baptism, in the third the Nativity, and in the fourth the Crucifixion. (*S. G. F., B. Mus. F. A.* VII, 1909, pp. 5-7.)

ENGLEWOOD.—**A Lombard (?) Madonna.**—F. MASON PERKINS publishes in *Rass. d' Arte*, 1909, p. 8, a Madonna in the collection of D. F.



1 (271)



2 (267)



3 (267)



4 (265)

HADRA VASES IN NEW YORK (1, 4) AND ATHENS (2, 3)



5 (264)



9 (246)



10 (245)



HADRA VASES IN NEW YORK



12 (244)



21 (239)



22 (239)



23 (239)

HADRA VASES IN ATHENS (12) AND NEW YORK (21, 22, 23)

DATED SEPULCHRAL VASES FROM ALEXANDRIA¹

[PLATES IX-XII]

So little certainty in the accurate dating of objects of archaeological interest is afforded by stylistic criteria and evidence derived from the history of artistic and technical development that every positive addition to our dated material is peculiarly welcome; for it is only by means of conclusions drawn from the objects themselves or from such circumstances of discovery as make assured dating possible, not from extraneous theories and suppositions, that really certain knowledge is to be attained.

In the first volume of the *American Journal of Archaeology*² A. C. Merriam published the inscriptions from a series of vases which were found at Alexandria and are now in the Metropolitan Museum in New York. These hydriae are of exceptional interest, primarily on account of their inscriptions, which record the name and the year of the death of the man whose ashes are deposited in each vessel.

Starting with an inscription which mentions a certain *Κωτίων Κλέωνος Δελφός Θεωρός τὰ Κωτήρια ἐπαγγέλλων*, Merriam determined in a most ingenious way the year 277-276 B.C. as the year of the death of this *theoros* and brought his presence at Alexandria into connection with the proclamation of the first celebration of the *Soteria* which had been established as a Panhellenic festival at the sanctuary of Delphi after the inroad of the Gauls had been driven back by the favor of the gods.

After Merriam others attempted, less happily and less conclusively, to use for their own purposes, not only this inscription, but also the other brief indications which the simple urns have preserved for us, and thus the chronology of these vases has

¹ Translated from the author's manuscript by H. N. F.

² 'Inscribed Sepulchral Vases from Alexandria,' *A.J.A.* I, 1885, pp. 18 ff.
American Journal of Archaeology, Second Series. *Journal of the*
Archaeological Institute of America, Vol. XIII (1909), No. 4.

been pushed back and forth through more than two centuries. For although the inscription preserves the name and origin of the deceased, the name of the man who was to have charge of the burial, and even the year, month, and day of the burial, unfortunately the years are given according to the reign of the king, and the king's name is always wanting. So it was possible to scatter arbitrarily over two centuries these vases which appear to be so accurately dated. For the history, not only of ceramic art, but also of ornament, and even for questions of epigraphy and of history itself, the exact determination of the date of this class of vases would necessarily be of interest; and therefore, as soon as these interesting discoveries were made known, the attempt to answer the question of date was repeatedly made. Unfortunately, however, no attention was paid to the archaeological side of the evidence, which is in this case the most important, for in view of the frequent occurrence of the same names, and of the custom of giving the grandchild the name of his grandfather, a system of dating founded on identity of names must lead to error. In a note I have given references to the literature of the subject, and I will only add that the book by Boesch, *Theoros*, led me to an archaeological discussion of the question.¹

¹ Paul Boesch, *Gewöbe*, 1908. Hadra vases are published or are mentioned: Merriam, *l.c.*; Néroutsois, *L'ancienne Alexandrie*, p. 75; Furtwängler, *Sammlung Somzée*, pl. XXXIX (98), p. 68, 3; Froehner, *Coll. Branteghem*, No. 227, *ibid.* No. 230, now in Berlin; Cesnola, *Salaminia*, Fig. 248; Furtwängler, *Neue Denkmäler antiker Kunst*, III (*Sitzb. Mün. Akad.* 1905), p. 277, Fig. 10; Watzinger, *Arch. Anz.* 1902, pp. 158 ff.; Sieglin-Schreiber, *Die Nekropole von Kōmesch-Schukûfa*, pp. 193 and 209, note 56; cf. p. 74, Fig. 37, p. 100, Fig. 96, p. 186, Fig. 118, p. 192, Fig. 130; Weicker, *Der Seelenvogel*, p. 80, Figs. 20, 20 a; A. de Ridder, *Coll. de Clercq*, IV, p. 109, pl. XXXVI; Bochlau, *Sammlung Vogell*, pl. V, 8, 12; Clermont-Ganneau, *Bull. de la Soc. archéol. d'Alexandrie*, X, 1908, pp. 3 ff., Figs. 1, 2; for details, cf. Zahn, *Priene*, p. 414; Watzinger, *Ath. Mitt.* 1901, p. 87; Hekler, *Jb. Arch. I.* XXIV, 1909, pp. 28 ff.; Pagenstecher, *Die Calenische Reliefkeramik*, p. 8 and *passim*. Further material in Vol. II of the Sieglin-Schreiber publication. On the inscriptions, besides Boesch and Merriam: Néroutsois, *l.c.*; Botti, *Catalogue du Musée gréco-romain*, pp. 100 ff.; Dittenberger, *Syll. inscr. orient. graeci*, I, 36, 37; Blümner, *Gött. gel. Anz.* 1885, II, p. 869 f.; Preuner, *Hermes*, XXIX, 1894, p. 534, n. 2; Strack, *Rh. Mus. N.F.* LIII, 1898, p. 412; Wilcken, *Gött. gel. Anz.* 1895, I, p. 142; Wilhelm, *Cl. R.* XIII, 1899, pp. 78 f.; Beloch, *Griech. Gesch.* III², pp. 415, 417; P. Meyer, *Heerwesen der Ptolemaeer*, *passim*; Watzinger, *Ath. Mitt.* 1901, p. 5; Pagenstecher, *Die Calen. Reliefkeramik*, p. 168^b; Breccia, *Bull. de la soc. archéol. d'Alexandrie*, IX, 1907,

In order to establish accurately the position in the development of ancient pottery of the Hadra vases (for that name is given to this class of Alexandrian pottery because it was first found in large quantity in Hadra, the eastern necropolis of the city), we must first cast a glance at the other ceramic material in Alexandria, with which our class has many and close connections. Alexandria was, as is well known, not an entirely new foundation; but an old Egyptian settlement, Rhakotis, existed already, cults of which are known and which is known also through pottery; for black-figured sherds of the first decennia of the sixth century B.C. have been found, though in small quantities, in Alexandria itself.¹ The latest productions of the red-figured style coincide with the foundation of the new city and correspond completely to the finds from the cemetery of Abusir, which have been published exhaustively by Watzinger.² Moreover, there is a splendid production of late Attic vase manufacture, the vase in Munich with the Judgment of Paris,³ and to this may be added a beautiful hydria, also in Munich,⁴ the native Alexandrian origin of which seems to me for various reasons probable.⁵ In Greece, Asia Minor, southern Russia, and Apulia, we find also many remains of the so-called "pottery of the western slope" (Keramik vom Westabhang) and of the "Gnathia" vases, in the development of which Alexandria doubtless had an important share.⁶ The Hadra vases also are, in the manner of their decoration, no peculiarity of Alexandria. Let us examine them more closely.

Three classes are to be distinguished:⁷ hydriae, with the p. 28, and *Guide du musée d'Alexandrie*, 123 ff.; see also Ziebarth, *Kulturbilder aus griechischen Stätten*, pp. 134 f., and Grenfell-Hunt, *The Hibeh Papyri*, I, 1906, Appendix I, pp. 332-358.

¹ To be discussed in Vol. II of the Sieglin-Schreiber publication.

² *Griechische Holz Sarkophage aus der Zeit Alexanders des Grossen (Ausgrabungen der Deutschen Orientgesellschaft in Abusir, II)*.

³ Furtwängler-Reichhold, *Gr. Vasenmalerei*, pl. 40, pp. 204 ff. Cf. Watzinger, *Holz Sarkophage*, p. 12, and Six, *Jb. Arch. I.* XXIV, 1909, p. 22, who makes use of the Judgment of Paris for his Euphranor.

⁴ *Führer durch die Kgl. Vasensammlung*, 1908, p. 69, No. 2757.

⁵ Pagenstecher, *Ath. Mitt.* XXXIII, 1908, p. 121, and *Calen. Reliefkeramik*, p. 7.

⁶ Watzinger, *Ath. Mitt. l.c.*; Zahn, *Arch. Anz.* 1907, pp. 225 ff.; Pagenstecher, *ibid.* 1909, p. 16.

⁷ Furtwängler, *Sitzb. Mün. Akad.* 1905, p. 277.

natural clay as background; those with a coating of yellow varnish; and, lastly, vases covered with white color. Of these we have to consider here only the class with the natural clay as background, for these alone bear the inscriptions which interest us. The decoration is painted with thin blackish brown color on the light reddish yellow clay. Ornamental motives are prevalent: sprays of ivy, flowers of the sort that occur on Apulian vases, palmettes, grapevines, wavy lines, also net and checkerboard patterns. Living beings, such as hunting Erotes, dolphins, and water-fowl, occur more rarely. The outlines are incised, so that the close connection with the Cabirium pottery is evident.¹ But we need not on that account consider the Alexandrian potters directly dependent upon the potteries of Thebes, by assuming, for instance, that, after the destruction of their native city, the Theban potters migrated to the newly founded city on the Nile, to carry on their handiwork there. Not only is the form of the vases quite different,—in Alexandria the hydria, which is foreign to the “Cabirium” pottery, is the prevalent form of burial urn,—but the ornaments and content are of an entirely different character. Just as Athens sent her Triptolemus to the Nile to found there a new Eleusis,² the Theban potter might have brought his Cabirus to his new home. Finally, the Hadra vases were not made immediately after the foundation of Alexandria. The cemetery of Abusir, which belongs to that time, has not produced a single sherd,³ and the light-colored ware is still wanting in the earliest Alexandrian graves as well. Rather, the Cabirium pottery and the Hadra vases are the chief representatives of a class which is found with various forms of expression throughout the Mediterranean region, and it is interesting and worthy of note that the three conservative countries, Egypt, Boeotia, and Apulia, are in this matter most prominent.

¹ Winnefeld, *Ath. Mitt.* XIII, 1888, pp. 412 ff.; Koerte, *ibid.* XIX, 1894, p. 346; Walters, *Hist. Anc. Pottery*, I, pp. 391 f.

² Cf. the Apulian vase, *Compte rendu de la Comm. Imp.* 1862, Pl. 4, pp. 54 ff., and Schreiber, *Philol. Versamml. Görlitz*, 1889, p. 311. On the Alexandrian Eleusis, Schiff, in *Pauly-Wissowa*, s.v. The cultus utensils called kerchnoi are found at Alexandria in simple form (cf. Rubensohn, *Ath. Mitt.* XXIII, 1898, p. 271). I remember a larger vase (kerchnos) in the Egyptian collection in Florence.

³ Watzinger, *Holzarkophage*, p. 10.

In 1908 Studniczka published an alabastrum from Lower Italy with black figures, similar to the Cabirium vases.¹ Other vases of this kind, with figured adornment, from Apulia, are not as yet known to me, though ornamental decoration has frequently been noticed.² So three Apulian jars with handles, in the Reimers collection at Hamburg, which correspond entirely to the Hadra vases, have become known to me (Fig. 1). Their decoration consists of horizontal lines running round the vases,



FIGURE 1.—APULIAN JARS IN HAMBURG.

between which are twigs of ivy and wreaths of laurel in dark color. Another small two-handled goblet in the same collection has carelessly painted vines, a last remnant of the magnificent Apulian vine ornament (Fig. 2 *a*). Smaller vases, also of yellow clay, ornamented only with dark vertical stripes, are not uncommon; they usually have the form of low lecythi, but little jugs and small amphorae also occur. They cannot be separated from very similar small vases which have been found, for instance, on the western slope of the acropolis. A small scyphus from Boeotia at Heidelberg (Fig. 2 *b*) is decorated with pressed palmettes, which proves its late date. If these ceramic products in Apulia are to be ascribed to potters who worked under purely Greek influence, on the other hand

¹ *Einige Antiken des Arch. Inst. d. Univ. Leipzig*, Winckelmannsfest, 1908, pl. III, 9; now in *Festschrift zur Feier des 500jährigen Bestehens der Universität Leipzig*, IV, 1, pl. V, 1, p. 18²¹.

² *E.g.* Sammlung Arndt, *Kurzer Führer*, p. 32, 3; Museo Provinciale in Lecce; Kestner-Museum in Hanover. Cf. *Arch. Anz.* 1909, p. 18²¹. A pot without handles, with decoration, which has a Cypriote look, in yellowish brown and black on a white ground in the museum at Taranto; but cf. the native Apulian works in M. Mayer's four articles on 'Die Keramik des Vorgriechischen Apuliens' in *Röm. Mitt.* (the last in 1908), and the interesting vase, *Mélanges Nicole*, pls. I, II (Furtwängler).

there are two very characteristic examples of the combination of native Apulian ornaments with Greek technique. I have shown elsewhere¹ how Greek elements were adopted in Apulia and worked over in the native manner. The "Torcella" vases of the museums in Lecce and Capua bear witness to this, and the list could be increased. We are interested in two pieces in the Reimers collection in Hamburg:² the terra-cotta statuette of a woman who bears on her head a vase in the form of a dish,³ and a candelabrum of the well-known Apulian form.



FIGURE 2.—VASES IN (a) HAMBURG AND (b, c) HEIDELBERG.

These two objects are to be published elsewhere; I can therefore only point out here that the same ornaments are employed on them as on the three jars with handles mentioned above, but that the terra-cotta statuette and the candelabrum are native childish work; the base of the candelabrum is adorned with figures such as occur on the Apulian giant askoi, *e.g.* *Not. Scav.* 1898, p. 210, Fig. 15. The graves are dated by M. Mayer in the third century B.C., a date which is confirmed by the Egyptian faience dish found with them.⁴ We may then assign the

¹ *Arch. Anz.* 1900, pp. 14 f.

² Soon to be published by M. Mayer.

³ Cf. *e.g.* M. Mayer, *Röm. Mitt.* XII, 1897, pl. X, and for the woman's necklace the terra-cotta, *ibid.* XXIII, 1908, pl. IX. For candelabra, see M. Mayer, *Not. Scav.* 1898, p. 209.

⁴ *Not. Scav. l.c.*, p. 203, Fig. 6; *Calen. Reliefkeramik*, p. 7^b.

Apulian vases here grouped together to the third century; the Leipzig alabastrum probably belongs to the fourth century, and helps us to establish the connection with the Cabirium pottery. In Apulia dark painting on a light ground was always popular, especially in Messapia, and maintained itself remarkably long in the entire local manufacture;¹ but we cannot believe that Apulia influenced other countries in this respect. On the other hand, the products which arose under Greek influence, such as the splendid Apulian amphorae with their rich decoration, did, I believe, exert a direct influence upon Alexandrian ornamentation.²

The strong reminiscences of Cyprus exhibited by early Apulian pottery have not been overlooked.³ It is quite possible that in later times this great conservative island was not without influence upon the development of our late black-figured decoration. This influence will present itself to our observation especially in Egypt.

In Greece the Boeotian pottery has already aroused our especial interest. Alongside of the Cabirium pottery proper, with its brilliant technique, its frequently careful preliminary drawing, its genial humor in burlesque representations, goes another class, probably later in chronological order, which usually dispenses with preliminary drawing and is utterly without care in work and execution.⁴ The shapes are various; a scyphus and a "lebes gamikos" have as yet been the objects



FIGURE 3. — BOEOTIAN VASE IN WÜRZBURG.

¹ See p. 391, note 2.

² *Arch. Anz.* 1909, pp. 17 f.

³ M. Mayer, in the articles cited above.

⁴ Watzinger, *Ath. Mitt. l.c.*, p. 55; *Ath. Mitt.* XIV, 1889, p. 151. Cf. Hauser, *Jb. Arch. I. X*, 1895, p. 157.

of careful investigation. The last-mentioned vase (Fig. 3) is in Würzburg and bears the inscription *χῆρε κῆ τόνει γάμι — ὦ τί λέγεις!* "Hail, and do thou too marry — O, what sayest thou?"¹ A vessel, also from Boeotia, of the same shape, but without the encouraging inscription, is in the possession of the Heidelberg Archaeological Institute. Fluting of the belly of the vase is indicated by vertical black lines interrupted by a



FIGURE 4.—VASES IN HEIDELBERG.

horizontal band on which water-fowl between flowering stalks are painted, a decoration which is repeated on the cover (Fig. 4 c).

The scyphus mentioned just above has been exhaustively discussed by Hauser (see p. 393, note 4). It shows in a humorous way the rule of strict discipline in the manufactory. Very similar in the drawing of the figures is a dish from Curium in Cyprus; this was found together with a bell of terra-cotta which seems to be wrought in the manner of the Cabirium vases.² A bell from Boeotia itself is in Heidelberg. Most nearly related to the black figures on these vases are the inner pictures of a group of large plates, three of which are known to me at present. Two of them are said to be from Marathon; one is now at

¹ From a photograph kindly furnished by Professor Bulle. See Sittl, *Arch. Anz.* 1892, p. 28; Kretschmer, *Glotta*, I. p. 82. The second *ε* in *λέγεις* is legible.

² Murray, *Excavations in Cyprus*, p. 76, Fig. 139²⁰⁸; cf. p. 70, Fig. 117.

Heidelberg (Fig. 5) and the other, as I am informed by F. von Duhn, in the Louvre. The plate in Heidelberg exhibits a maenad hastening to the left. The execution is very poor. The decoration around the circle consists of a meander interrupted by animals which cannot be specified. The same decoration is repeated round the edge of the plate, while the outside exhibits palmettes of late form, similar to those on the pyxis (Fig. 4 *b*).



FIGURE 5. — PLATE IN HEIDELBERG.

The handles retain only in a rudimentary fashion the character of their metallic prototypes. The third plate is in the Jatta collection at Ruvo. The inner circle is filled by a female figure hastening toward the left and balancing in her hand a sort of thymiaterion.

I mention these plates here, because a vase from Boeotia in the Heidelberg collection exhibits figures in quite the same style (Fig. 6). A woman is seen walking toward the left, laden, apparently, with offerings for the grave; she is followed by a long-tailed figure with similar offerings. The painting is exe-

cutted only in silhouette and corresponds completely to the work on the above-mentioned scyphus, which is related to the Cabirium pottery.

Three further vases of the Heidelberg collection¹ may be mentioned here, which enable us to fix more exactly the position of this class. Two stamni are from Boeotia. One of these belongs in shape with the beautiful vase published by Furtwängler,



FIGURE 6. — VASE FROM BOEOTIA IN HEIDELBERG.

Sammlung Sabureff, pl. 70 (Fig. 4 *a*). The birds correspond to the animals on the "lebes gamikos" (the lid does not belong to the vase). The second stamnos has only decorative ornament, and the sprays of leaves are like those that occur frequently on the Hadra vases (Fig. 2 *c*). The large pyxis, which exhibits especially fine and good work, is said to be from Ceos (Fig. 4 *b*). The upper frieze consists of alternating palmettes and lotus, the lower entirely of palmettes.² The two friezes are separated by a raised band — here also imitation of metal — adorned with an ornament which may be regarded as the last development of the late red-figured continuous palmette band, such as is published, for example, by Walters, *History of Ancient Pottery*, II, p. 229, Fig. 167.

From this band then we obtain an indication of the date of these vases, and this confirms our natural judgment. Those

¹ A stamnos and a small hydria of the same class from Boeotia are in Würzburg.

² Cf. the ornament in Watzinger, *Holzarkophage*, p. 40, Fig. 72.

vases painted with hastily executed figures, the drawing of which almost approaches geometrical forms, and the vases with purely decorative ornament follow closely upon the Cabirium pottery proper, which comes to an end with the destruction of Thebes in 337 B.C., and continue into the third century, as is made probable by the stamnos with the warts (Fig. 4 a) in comparison with the Saburoff vase. We must suppose that the place of manufacture was some town in Boeotia. It has already been mentioned that small imitations of larger vases of the same technique, which also belong to the same period, have been found on the western slope of the acropolis.

According to a remark of Conze's in *Kleinfunde aus Pergamon*, p. 15, hastily painted decoration in black or blackish brown color on dull reddish yellow ground has been found at Pergamon.¹

The Egyptian representatives of this class, the Hadra vases, were not exported to the countries heretofore discussed. They are found outside of Alexandria only in Cyprus, Crete, and southern Russia.

Other importations from Egypt are found also in southern Russia,² although there is nothing against the assumption that the ashes of dwellers by the Black Sea who died at Alexandria were carried back to their home in these receptacles, for this is the explanation of the exportation of the vases. An especially simple specimen from Crete is now at Athens. More interesting is the admirable hydria of the Somzée collection (Froehner, *Collection Somzée*, pl. 39) which bears a Cypriote inscription. This does not prove that the vase itself is Cypriote work; more likely the relatives of the deceased Cypriote inscribed his name in their own writing. So a recently published vase, found at Alexandria itself, bears a Punic inscription.³ The decoration of the vase with the Cypriote inscription—marine animals on a band extending from handle to handle—is splendid and well adapted to recall to our memory the "Alexandrina beluata

¹ "Flüchtig in schwarzer, schwarzbrauner Farbe auf matt rötlich gelbem Grund hingeworfenes Ornament." Cf. Jacobsthal, *Ath. Mitt.* XXXIII, 1908, p. 426.

² *Compte rendu*, 1868, pl. 3. But the two hydriae in the Vogell collection may also have been imported in modern times (*Sammlung Vogell*, pl. V, 8, 12).

³ Clermont-Ganneau, *Bull. de la soc. archéol. d'Alexandrie*, X, 1908, pp. 3 ff. Cf. also the mummy wrapping in Agram with Etruscan writing.

tonsilia tappetia" of Plautus (*Pseudolus*, 146 f., ed. Goetz-Schöll). The decorative effect of the Nereid frieze on the sarcophagus from Anapa is quite similar.¹ A second Hadra vase is published by Cesnola, *Salaminia*, Fig. 248. Much other work in this style was also done in Cyprus, some references to which I have collected in the note.² How strong the influence of old Cypriote tradition was in this is shown by such vases as the jugs published by Herrmann, Figs. 41 and 42. The elements of native art are mingled with the imported Greek motives. It is evident that in these cases the work is native.

So far we have had occasion to speak only of naturalistic ornament. In Cyprus we meet also with geometrical decoration to a considerable extent. An exceptionally interesting example is the vase with the inscription Ἀρσινόης Φιλαδέλφου, published by Cesnola, *Salaminia*, p. 253, Fig. 238. The remarkable shape of the vase is old Cyprian, as is proved, e.g., by the examples published in *The Cesnola Collection*, II, pl. CVII. The decoration also is derived from patterns employed in earlier times; on the other hand the network on the neck is, as is well known, an ornament in frequent use not only on the pottery of the western slope, but also on our Hadra vases. Botti has published a fragment of a large cylindrical vase which presents, as it were, a chart of Cypriote decorative patterns in Hellenistic times.³ Watzinger was the first to recognize the Hellenistic character of this very interesting fragment. I regard it as a part of the neck of one of those immensely large Cypriote jars, because the overloaded decoration is popular in other cases on this part of the vase. The existence of export trade from Cyprus to Egypt is a matter of course, and undoubtedly direct importations continued to influence Alexandrian ceramics in Hellenistic times. I should imagine that not even the pottery

¹ Watzinger, *Holzarkophage*, p. 36, Fig. 64.

² *Cesnola Collection*, II, pl. CVII (old Cypriote), CXXXV-CXXXVII; Cesnola, *Cyprus*, pl. V, 2 (early); Cesnola, *Salaminia*, p. 253, Figs. 238, 240; M. Ohnefalsch-Richter, *Kypros, die Bibel und Homer*, pls. 64, 1 and 3, CLXXXI, 1 and 2, CLXXVI, 2; Herrmann, *Das Gräberfeld von Marion auf Cypern* (48 Berlin. Winckelmannsprogramm, 1888), pp. 37, 58 ff.

³ *Fouilles à la Colonne Théodosienne*, p. 73, recognized as Hellenistic by Watzinger, *Ath. Mitt. l.c.* 87¹. On similar striped decorations on the neck cf. *Cesnola Collection*, II, pl. CXII, 882.

of the western slope arose without Cypriote influence, which might have led Alexandria to the first employment of these geometrical motives on Greek vases. We can instance other proofs of connection with Cyprus. A small bottle from Alexandria in Heidelberg finds a perfect counterpart in a small jug which a little terra-cotta figure on a Cypriote vase holds in its hand,¹ and the little vase on the lid of the pyxis in Heidelberg (Fig. 4*b*) discussed above, the decoration of which reminded us of Egypt, may be compared not only with the Hellenistic vase, *Cesnola Collection*, II, pl. CXXXV, No. 992, but also with its far earlier predecessors, Vol. II, pl. CV.

The style of the vases of Hellenistic times in Cyprus, which can be deduced so completely from that which was in use from the earliest times, demands thorough investigation. Here only are we able to follow a continuous series without gaps, and doubtless such a series existed nowhere else. Cypriote influence upon ornament in the Hellenistic period must, especially in Egypt, have been greater than is ordinarily assumed. The political connections of the island with the kingdom of the Ptolemies were, after the annexation of Cyprus in 295 B.C., peculiarly close, and the close reciprocal relations are easily understood.

If Cyprus may be considered responsible for the geometrical part of the Alexandrian ornamental motives, the home of the naturalistic part must be sought elsewhere. The close connection with Apulia has, to be sure, not been overlooked, but the marked similarities which exist have been regarded as Ionic inheritances.² Watzinger himself has connected some paintings on Tarentine vases with Antiphilus,³ but had in mind a period of that master's life preceding his activity at Alexandria. Why? Could not the art of Antiphilus be carried from Alexandria to Apulia as well as the products of Alexandrian industry? Rubensohn has recently mentioned a work of this much-esteemed master in connection with the fine discovery at Mit-Rahine.⁴ The drawing on Tarentine vases of the end of the fourth century was mentioned by Furtwängler in connec-

¹ The bottle in Heidelberg, Sieglin-Schreiber, Vol. II; cf. *Cesnola Collection*, II, pl. CXXXIII, 981.

² Drexel, *Bonner Jahrbücher*, 118 (1909), p. 219.

³ *De vasculis pictis Tarentinis*, pp. 35 ff.

⁴ *Arch. Anz.* 1907, p. 370.

tion with the vase in Munich with the Judgment of Paris, and if the Apulian amphora published by Heydemann¹ really offers us a reminiscence of the battle of Issus—just as the vase with the Departure of Triptolemus points towards the Nile and Alexandria—the connection between the art of the two countries becomes closer and closer. I have already indicated that Alexandria played an important part in the development of the decoration of the Gnathia vases, and I have shown elsewhere² that Egyptian exports are found in Apulia as well as Apulian exports in Alexandria. We know, too, from other sources, that there was lively intercourse between southern Italy and the Ptolemaic kingdom. Theocritus lived at the courts of Hiero and Philadelphus.³

Whatever came together in the cosmopolitan city was eagerly accepted and the attempt to make all possible use of everything did not tend toward refinement of taste. The objects discovered at Egyed have recently been published,⁴ Alexandrian productions of the third century B.C. The decoration of the pan exhibits various borrowed ornamental motives which are employed in the wrong places and produce a meaningless effect. The feeling that each decorative member has its own purpose, the sense for the architecture of ornament, was unknown to the silversmith who composed this medley. The decoration of some of the Hadra vases of just this period is equally ill regulated. Let us now turn to this decoration.

A very early stage of the employment of Apulian vine-ornament is exhibited by the amphora in Alexandria already mentioned by me elsewhere.⁵ Here the sprays of leaves appear

¹ Heydemann, *Alexander d. Grosse und Darius* (8 Hall. Winkelmannsprog., 1883). In agreement, Furtwängler-Reichhold, II, 153; in opposition, Robert, *Marathonsschlacht*, p. 35.

² *Arch. Anz.* 1909, p. 17; M. Mayer, *Not. Scav.* 1898, p. 216.

³ His Adoniazusae are Syracusan women in Alexandria; the ship of state of Ptolemy IV may be compared with the similar vessel of Hiero (Athenaeus, 203, 206) which he afterwards presented to Ptolemy. On other close relations, see Holm, *Geschichte Siziliens*, III, 39.

⁴ Hekler, *Jb. Arch. I.* XXIV, 1909, pp. 28 ff.; Von Bissing, *ibid.* pp. 40 ff., who properly emphasizes, in opposition to Hekler, the influence of Alexandria upon Rome.

⁵ Breccia, *Rapport sur la marche du service du musée d'Alexandrie*, 1907, Fig. 1; cf. *Arch. Anz.* 1909, p. 18.

in the conventional form properly regarded by Watzinger as an Alexandrian development, which is more and more simplified until it becomes cold and lifeless.¹ But foreign influence can be recognized also in the figured adornment of the Hadra vases.

The figured adornment takes into consideration in some measure the fact that the urn was to be a receptacle for the ashes of the dead. The form of the vase, the hydria, was the one which was in almost exclusive use for burial urns, in comparison with which all other forms are, for that purpose, almost non-existent.² The idea that the water jar is peculiarly fitted to serve as the last resting-place of the dead has certainly something to do with this, in view of the ceremonies of purification and the fact that, according to the most ancient beliefs, in Egypt especially, the deceased were so peculiarly in need of water. How corporeal the conception was is evident from the arrangements for the continued supply of water for the deceased himself, from the sacred offerings and the wall paintings, and finally from the wish which became a regular formula: *δοῶ σοι ὁ Ὅσιος τὸ ψυχρὸν ὕδωρ*.³ It is quite comprehensible that the makers of the vases gradually ceased to attach importance to the shape. Only the earliest examples still completely fulfil the conditions imposed by their original purpose, which were admirably formulated by Semper.⁴

¹ Watzinger, *Holzarkophage*, p. 76.

² Fölzer, *Die Hydria*, pp. 15. ff.

³ Sieglin-Schreiber, I; *Die Nekropole von Kôm-esch-Schukâfa*, chapter XVII.

⁴ Semper, *Der Stil in den technischen und tektonischen Künsten*, II, pp. 4 ff. :

"Wir fühlen lebhaft die volle Zweckangemessenheit dieser Form [the Egyptian situla], welche der entschiedene Gegensatz jener griechischen Hydria ist, deren Bestimmung darin besteht, das Wasser nicht zu schöpfen, sondern es, wie es vom Brunnen fließt, aufzufangen. Daher die Trichterform des Halses und die Kesselform des Rumpfes, dessen Schwerkräftsmittelpunkt hier der Mündung möglichst nahe gelegen ist; denn die etruskischen und griechischen Frauen trugen ihre Hydrien auf ihren Häuptern, — aufrecht, wenn voll, horizontal, wenn leer. — Wer den Versuch macht, einen Stock auf seiner Fingerspitze zu balancieren, wird dieses Kunststück leichter finden, wenn er das schwerste Ende des Stockes zu oberst nimmt: Diess Experiment erklärt die Grundform der hellenischen Hydria, die ihre Vervollständigung erhält durch zwei horizontale Henkel, im Niveau des Schwerpunktes, zum Heben des vollen, und eines dritten vertikalen, zum tragen und aufhängen des leeren Gefäßes, vielleicht auch als Handhabe für eine zweite Person, welche der Wasserträgerin beisteht, das volle Gefäß auf den Kopf zu heben."

In the Berlin Antiquarium is a Hadra hydria with the incised inscription ΠΥΛΩΝ ΑΓΩΝΙ ΕΓΡΑΨΕ.¹ The impression of the linen in which the urn was wrapped is preserved on the sinter. It is not likely that the vase was painted by Pylon for a contest, as were, for instance, the Panathenaic amphorae. Agon is rather to be regarded as a proper name, as it was the name of the charioteer of Pelops. Everything indicates that our vase is an early one. The birds on the shoulder correspond completely to those published above on Boeotian vases, and the representation on the belly also — two Erotes hunting a stag — still reminds one very distinctly, by its offhand drawing and incised outlines, of the Cabirium pottery. The leaves from which the vase, as it were, grows up, have already been included by Zahn in his characterization of the development of Hellenistic ornament. Everything speaks for an early date, including also (and this is our immediate concern) the shape, which has not yet the more slender form of the later period, but is related to the late Attic and the South Russian hydriae. The great breadth and the squat shape are seen also in a second Hadra vase which awakens especial interest on account of its decoration. It bears in very beautiful characters the words: ΔΩΡΗΤΗ ΓΥΝΑΙΚ. ΓΛΥΚΥΤΑΤΗ ΕΥΦΗΜΟC ΑΝΗΡ ΕΥΨΥΧΕΙ ΚΥΡΙΑ.² The present decoration exhibits the blue-red colors of the earlier Egyptian pottery on the neck and belly, and the main field has a green background on which are brown dolphins much more carefully drawn than those on the Pylon hydria. But under this remnants of ornamentation which differs in no way from that of the ordinary Hadra vases are preserved. These two especially fine pieces may suffice as examples of the earliest shapes. In their decoration they exhibit on the one hand a harking back to the Cabirium pottery, on the other affiliation with old Egyptian tradition.

A vase in New York (Fig. 7) recalls, by its rich ornamentation of vine and foliage, the Apulian manner of decoration. This vase also, on account of its shape and especially by reason

¹ *Vas. Inv.* 3767, from Alexandria; Froehner, *Coll. Branteghem*, 230. An illustration will be given by Sieglin-Schreiber, Vol. II.

² To be published in the second volume of the Sieglin-Schreiber work. The inscription, Sieglin-Schreiber, I, p. 209, note 54.

of its connection with what preceded it, belongs to a relatively early time.

Before proceeding to the question of the chronological order of the Hadra vases, we must call to mind a few further facts which are important in fixing the general date of the whole class; for it is only through such indications that we can finally decide which of the Ptolemies are to be considered in connection with our vases. Figure 8 reproduces a good specimen in the Metropolitan Museum, which is adorned



FIGURE 8.—HADRA VASE IN NEW YORK.



FIGURE 7.—HADRA VASE IN NEW YORK.

with columns between which wreaths are hung up. It is perfectly evident that this decoration is derived from the customary adornment of sarcophagi, and such a prototype is actually preserved in the sarcophagus from Kertch which Watzinger (*l.c.* p. 89) is inclined to date "as early as possible." The wreaths suggest the ornaments of the dead, in the same spirit in which whole garlands were painted or wreaths in stucco were hung upon the vases.¹

The vase reproduced in Figure 9 is also interesting. The perspective meander occurs also, *e.g.* on Apulian sepulchral vases, on the plate of Plator found at Teano, and, as Zahn informs me, on a polychrome flask in the Berlin museum.² All these

¹ Cf. Watzinger, *Holzarkophage*, p. 19; Pagenstecher, *Celen. Reliefkeramik*, p. 20.

² Berlin, Furtwängler, 4088; the plate of Plator, *Celen. Reliefkeramik*, p. 120, Fig. 50.

parallels are certainly not to be brought down very far into the third century. In spite of the rather decadent shape of this vase, which it has in common with two very similarly decorated vases in Berlin and in the former Vogell collection,¹ we must not imagine that it belongs to a late date; this is shown by the polychrome dish in the Louvre,² which must belong to the beginning of the third century B.C. In any event, we cannot come down later than the middle of the cen-



FIGURE 9. — HADRA VASE.



FIGURE 10. — HYDRIA IN NEW YORK.

tury with these hydriae. The very late form of bucranium employed here is first seen on vases of lower Italy and the gateway of Ptolemy Philadelphus at Samothrace. Here also the fillets hang down from the horns.³ Finally, a fine, slender hydria in New York (Fig. 10) must belong to the same time. The leaves in relief recall an often-mentioned, but still unpub-

¹ Sieglin-Schreiber, Vol. II, and *Sammlung Vogell*, pl. V, 12.

² *Calen. Reliefkeramik*, pl. I, pp. 7 f.

³ Altmann, *Architektur und Ornamentik der Sarkophage*, pp. 62 f. Cf. Springer-Michaelis, *Handbuch d. Kunstgesch.* I³, Fig. 575, and *Monum. d. I.* VI, 37.

lished hydria in Munich which exhibits opaque painting on a black ground. I have elsewhere brought the mask on the handle of this vase into close connection with the above-mentioned dish from Crete, now in Paris.

A few further documents may be cited. With the vase-decoration reproduced by Sieglin-Schreiber, I, p. 186, Fig. 118, compare the sarcophagus No. 9 in Watzinger's *Holzsarkophage*, in which papyri of the third century B.C. were preserved. In connection with the frequently occurring Ionic columns, I may refer again to a Gnathia cantharus in Naples¹ which I have already mentioned, as well as to Gargiulo, *Collection des différentes formes des vases italo-grecs*, ed. I, Naples, 1822, pl. III, 36. On the vase in Munich with the representation of the Lower World, and often elsewhere, a hanging wheel, drawn in perspective, is seen, and this recurs on our Hadra vase.

It may be remarked further that a hydria in the museum at Alexandria with ordinary foliage-ornament has the white coating of those Hellenistic festival jugs which are dated in the middle of the third century B.C. by means of coins.²

We know little as yet about the conditions under which the vases were discovered. As has been said above, this pottery is not yet present at Abusir, yet it is found at Alexandria together with those black panel-hydriae which are to be dated in the first half of the third century B.C.³

Let us summarize briefly the results of our investigation: In pursuance of a technique practised in several places, the chief representative of which is the Cabirium pottery, a class of hydriae was manufactured at Alexandria from the end of the fourth into the second half of the third century B.C., the shape of which was at first modelled upon previous forms, but then in course of time became more slender, while the orna-

¹ *Arch. Anz.* 1909, p. 6, No. 35, and pp. 16 f. A Hadra vase in Alexandria has a swan and wreaths in Ionic architecture.

² The literature, *Arch. Anz.* 1909, p. 16. A jug from Kertch (*Arch. Anz.* 1907, pp. 137 f.) is interesting on account of its painting, on the style of which cf. a Hadra vase in New York with animals in outline drawing on the neck.

³ Breccia, *Bull. de la soc. archéol. d'Alexandrie*, IX, 1907, pp. 27 f. On the black vases, Furtwängler, *Sammlung Saburoff*, LXXXIV; *Calen. Reliefkeramik*, p. 10 and *passim*. Sieglin-Schreiber, I, p. 192, Fig. 131. Conditions of discovery, *ibid.* p. 193 and p. 209, note 56.

mentation, which at first adopted especially Boeotian, Cypriote, and Apulian motives in their integrity and without mixing them, afterwards combined the various elements of decoration in a senseless way. The pan from Egyed belongs also to the middle of the third century.

If we now at last arrange in accordance with these results the vases with inscriptions giving dates, and make use of the indications afforded by the numbers of the years, we arrive at the time of the second and third Ptolemies as the period of our hydriae, the dates in larger numbers belonging to the time of Philadelphus, those in smaller numbers to that of his successor, Euergetes, so that we obtain an unbroken succession embracing the years 271 to 239 B.C.

I give here in this order the list of dated vase inscriptions known to me. For information concerning the examples in New York and Athens I am indebted to Miss Gisela M. A. Richter and Dr. Müller respectively.¹

1. Θαρσυφας θεωρος Κρης Απολλωνιος δια Καραπιωνος Λιδ' Απε-
(λλαιου) . . .

Merriam 7. Year, 271. PLATE IX.

2. ιη' Περιτιον Ἰ (?) (δια) Καραπιωνος ρυ Μενωνος
Κυρηνιο(υ) . . . οβατης.

Athens. Year, 267. PLATE IX.

3. ιη' Υπερβε(ρεταιου) . . . δι(α) C)α(ραπιωνος λτων(?)
Αρκαδο(s) ει πρεσβε(ντου).

Athens. Year, 267. PLATE IX.

4. Δια Σαραπιωνος Λκ' Ηγησιου του Αγλωφανους.

Merriam 8. Year, 265. PLATE IX.

5. Ετους ενος και εικοστου μηνος Λωιου δια Καραπιωνος Ιερωνιδης
Λαμπωνος Φωκαεινς αρχιθewρος.

Merriam 9. Year, 264. PLATE X.

6. Λκε' (μ)ηνος μαρχος φ

ορ. υνσ

Merriam 15. Year, 260.

¹ Merriam, the fundamental article, *A.J.A.* I, 1885; Athens: In the National Museum, unpublished; Breccia, *Bull. de la soc. archéol. d'Alexandrie*, IX, 1907; Botti, *Catalogue du Musée gréco-romain*, 1901; Watzinger, *Arch. Anz.* 1902, pp. 158 ff.; Néroutsoz, *L'ancienne Alexandrie*.

7. Αγωνίς Λκε' Γορπικον.
Breccia, *Bull.* 1907, p. 28. Year, 260.
8. Λςλ' μηνος Δαισιον εννατη Ατταλος Ακαρναν με(λ)λακ(ιον).
Botti 1778. Year, 249.
9. Λβ' μηνος Πανδημον δια Θεοδοτου Ανδρομης Επιγενους Φαλασαρνιος Κρης.
Merriam 1. Year, 246. PLATE X.
10. Λγ' Διον (ι)ε δια Θεοδοτου αγοραστου Θεωνδον Σαμοθραικος.
Merriam 2. Year, 245. PLATE X.
11. Λδ' Ξανδικου ιη Αλεξικρατου . . . ρο(?) Ναυκρατιδου απαδας Κτησων(ο)ς.
Watzinger 2. Year, 244.
12. Λδ' Λωιον κθ επνοειση Δευτεροιος Δαμωνος του Ερατωνιδου Αστυπαλαιεως.
Athens. Year, 244. PLATE XII.
13. Δια Φιλωνος ετους ε' Ξανδικου ε Μενεκλεους Κρητος ηγεμονος.
Botti 1780. Year, 243.
14. Λς' Παναμον κε' δια Θεοδοτου αγοραστου Αναξίλαου του Αριστεος Αχαιου αρχιθεωρου Δυμμιου.
Merriam 3. Year, 242. PLATE XI.
15. Λς' Παχων κζ' Αρπαλου του Αρσαμου.
Merriam 18. Year, 242. PLATE XI.
16. [? Νικια(δου)] δια Φιλωνος ετους ζ Δυστρον ι' (Α)ριστοκλεους Αγο
Botti 1784. Year, 241.
17. Botti 1782: "Urne cinéraire d'un mercenaire de la Grèce, mort en l'an 214 (i.e. 241 B.C.), avant notre ère."
18. Δια Φιλωνος ετους η' Ανδναιου δ ονοπ
Néroutsos 13. Year, 240.
19. Δια Φιλωνος ετους η' Ξανδικου κε' Φιλωτου ιππαρχου των Διαγτανδρου του Παννησιδημου σχ (φ ").
Watzinger 1. Year, 240.
20. Δια Φιλωνος ετους η' Διου ιγ' Θαλητος Κυζικηνου πρεσβευτου.
Botti 1786. Year, 240.
21. Λθ' Μεχειρ . . . Δαμ(ιαστου) Κ(λ)εαρχου (θεω)ρος Βαι(ωτιος) δια Θε(ο)δοτου αγοραστ(ου).
Merriam 4. Year, 239. PLATE XII.

22. Λθ' Ὑπερβερεταιον λ' Φαρμονθι ζ' Τιμασιθεου του Διονυσιου Ροδιου
πριςβεντου δια Θεοδοτου αγοραστον.

Merriam 5. Year, 239. PLATE XII.

23. Λθ' Cωτιων Κλεωνος Δελφος θεωρος τα Cωτηρια επαγγελλων δια Θεοδο-
του αγοραστον.

Merriam 6. Year, 239. PLATE XII.

For the sake of convenience I have made the above list of the inscriptions alone. The same order is adopted in the following brief description of the vases themselves, with a discussion of their inscriptions. The descriptions are based for Athens and New York on photographs, for Cairo on Watzinger's statements, and for Alexandria, unless otherwise stated, on my notes.

1. New York. Tharsyphos, a Cretan *theoros*. The burial was in charge of Sarapion. He held until the year 265 the office of depositing the ash-urns or, more probably, of keeping accounts of the acceptance and performance of offerings to the dead; for his successor Theodotos designates himself by his official title *agorastes*¹ (21-23), which is probably identical with the title *agoranomos*, which came into use in the time of Philopator, and that is equivalent to *notary*.² He therefore probably drew up the document concerning the agreements entered into between the *choachytae* and the heirs of the deceased, such as have been preserved to us in the original.

The man whose ashes were here interred was a Cretan and had come to Alexandria as a *theoros*.³ On the *theoroi* I can now refer to the investigation by Boesch. He assigned the vases to a late date on the ground of the identification of the Egyptian with the Macedonian calendar. This point will be discussed in connection with the last two inscriptions.⁴

The shape of the vase is unique in our series of hydriae. The

¹ Merriam explained the title as "an official of the palace." P. Meyer, *Heerenes der Ptolemaeer*, p. 14, on Néroutsos No. 21, makes everything refer to military affairs.

² Otto, *Priester und Tempel im hellenistischen Aegypten*, II, pp. 297^a, 349. Oehler, in Pauly-Wissowa, s. v. *Agoranomos*, col. 885.

³ A *theoros* seems to be mentioned also on a Hadra vase of the Römisch-Germanisches Centralmuseum in Mainz, for the knowledge of which I am indebted to Dr. Behn. I am kindly informed that the inscription reads: *Ηροδοτος* (θε)ωρος Αντιγυ ρος Γενετωρ Ηροφι. See *Zeitschr. f. Numism.*, 1916, p. 176.

⁴ *Θεωρός*, pp. 133 ff.

form of neck and belly recalls most nearly the elegant little vase 15 of the year 242, but the foot is quite wretched. A similar shape is, for instance, that of the vase from the necropolis of Marion in Cyprus, the ornamentation of which might bring us into the period of our hydria.¹ Here the decoration is limited to a frieze of lotus buds and indistinct motives on the neck. Lotus bands occur also on a very fine pyxis in the Heidelberg collection, which is far better in technique than the other products of the later black-figured vase-painting, and also on the small hydria in the Würzburg collection already mentioned, which belongs among the successors of the Cabirium pottery. So shape and decoration are not opposed to the date 271 B.C., whereas they would not be so easily explained at the end of our series.

2. Athens. The man whose urn we have before us came from Cyrene, and the burial was again in charge of Sarapion. The inscription is incompletely preserved. Edge of mouth and handle striped. Neck: laurel branch, under it a band with tassels. Belly: sprays of ivy in the Cabirium manner, framed at the sides by network, above by short, vertical lines, the rudiments of an astragal. The form of the vase is still squat.

3. Athens. Sarapion is mentioned again. Here the office of the deceased is also mentioned. He was *πρεσβευτής*, that is, he was sent as delegate to the festival from Arcadia to Egypt. Edge of mouth, handle, and neck as in No. 2. The shoulder, too, still has foliage ornament. On the belly less restrained sprays of ivy, which occupy only the upper half of the available space and are marked off below by a band with tassels.

4. New York. Néroutsos read *Απολλωνιατου* instead of *Αγλωφανους*. P. Meyer (*Heerwesen der Ptolemaeer*, p. 13⁴⁸) also assumes the reckoning by the years of the reign of Philadelphus, but he goes too far when he simply and unhesitatingly explains all those buried here as mercenaries and makes Philon, who is mentioned on some vases as having charge of the burial, the commander of the regiment. How does this colonel come to be burying a *πρεσβευτής* (No. 20)? The ornamentation corresponds completely to that of the preceding hydria, except that a simple line forms the border below the sprays of ivy.

¹ Herrmann, *l.c.* p. 37, Fig. 23.

5. New York. Néroutsos 40. The inscription is very carefully written and exceptionally detailed. The number of the year is written out, which is nowhere else the case. The reason for this may be the exalted position of the deceased *architheoros*. P. Meyer (*l.c.* p. 9³⁰) reckoned properly here also by the years of Philadelphus, following Dittenberger, who gives "mense Julio anni 264 a. Chr. n." as the date of the burial (*Syll. inscr. orient. graeci*, I, 37).

The ornamentation as on No. 2, only very much more careful; the astragal is clearly recognizable. There are added a wave pattern ("laufender Hund") on the shoulder and spirals over the handle. The vase itself is very squat, whereas the next following is very much more slender. Between them is a gap not yet filled, of eighteen years. The necropolis of this time does not yet seem to have been found; but it would hardly offer much that is new, for we have a hydria of the year 244 with the same ornamentation — though, to be sure, much more confused — as that of the year 271. But first a vase of uncertain date is to be mentioned.

6. New York. The letters of the number of the year seem to be restored by Merriam. I am not acquainted with the ornamentation.

7. Alexandria. The form of the name of the month is usually Γορπιαῖος; the spelling corresponds to the pronunciation, as, indeed, Greek was generally badly spelled.¹ "La paleografia certo ci richiama a un periodo non molto inoltrato dell'età tolemaica, fors' anco del 3° secolo av. Cristo . . . con zone di decorazioni a elementi floreali e lineari, in rosso sporco" (Breccia). The vase was found with the splendid black statuette-vase published on p. 27 of Breccia's report — a very important chronological indication and a proof that Philadelphus is the only king by whose reign these twenty-five years can be reckoned.

8. Alexandria. Néroutsos (15) dates the inscription in the year 146 and translates, restoring the last letters as μελλάκιον, "Attalos Acarnanien, cadet." He is followed by P. Meyer (*l.c.* p. 5⁷), who takes μελλάκιον as βασιλικός παῖς.

Ornamentation not very fine. Edge of mouth, handle, and

¹ Cf. *Calen. Reliefkeramik*, p. 168⁶.

neck as usual. On the belly, in the customary frame, the same branches as on the neck.

9. New York. Néroutsos 32. Here Theodotos is mentioned as ἀγοραστής for the first time. Cf. P. Meyer, *l.c.* p. 11³⁷.

Edge of mouth, handle, and neck as usual. On the shoulder a branch of laurel; on the belly, below the customary sprays of ivy and in the usual frame, slender vine ornament, such as is found on some sarcophagi in Alexandrian adaptation of Apulian motives. Megarian bowls also show the same kind of ornamentation.¹ Theodotos continues as *agorastes* until the year 239; from 243 to 240 Philon is associated with him.

10. New York. Néroutsos 34. Wilhelm (*Cl. R.* XIII, 1899, pp. 78 f.) brought our Theondas into connection with a Theondas mentioned by Livy (XLV, 5) in the year 118. If the two men of the same name are to be connected, they might rather be regarded as grandfather and grandson.

The ornamentation exhibits not a little relation to the pottery of the western slope.² Edge of mouth, handle, neck, and framing of the field of decoration, as usual. In the field, net pattern and band of waving lines, with dots below. On the shoulder, band with tassels and reversed egg-and-dart. With this and the preceding vase that unattractive confusion begins which I have mentioned above in speaking of the pan from Egyed.

11. Cairo. Néroutsos 35. In the word *Ναυκρατίδου*, the δ is a mistake for τ. The last letters are obscure. Watzinger suggests a statement of costs. "Handle and horizontal handles with transverse lines. Neck: band of laurel with fruit. Belly: band of laurel, under it, 'Spritzstreifen' and to right and left net pattern. Under the lower handles a 'Spritzstreifen' going around the vase, and two lines."

12. Athens. Deuterioios, son of Damon, son of Eratonides, from the island of Astypalaea in the Cyclades. Probably *επνοεισμη* is a mistake for (ἐξ)επνοησε. The decoration is very similar to that of No. 2, only much more confused. On the shoulder a wreath of leaves.

13. Alexandria. Néroutsos 12. Referred by P. Meyer (*l.c.* p. 13⁴⁶) to the reign of Philopator. Philon is mentioned

¹ Zahn, *Priene*, p. 403³⁷. An exactly corresponding example is in Alexandria.

² Watzinger, *Ath. Mitt. l.c.* p. 85.

as *ἀγοραστής* for the first time, for he must hold the same office as Theodotos and cannot be leader of the Neocretans, as Watzinger and P. Meyer, following Néroutsos and Botti, consider him.¹ This Philon happens to be mentioned by Polybius (V, 65) as leader of a troop of horse in the battle of Raphia. That the fifth year of Philopator's reign coincides with the date of this battle is an accident of the same kind as the coincidence of the first celebration of the Soteria with the date of the urn No. 23. That Philon buried the Cretan officer Menekles is as much a matter of chance as that he buried the hipparch Philotas (No. 19) and the Cyrenaeen envoy Thales. It furnishes no information as to the date.

Neck: loose leaves; on the shoulder, rosettes; on the belly, alternately forms like reeds and palmettes. This reed form appears frequently on the deep, hemispherical faience bowls of the third century.² It is a simplification of those rich plant forms which are seen between the figures on the Athenian plate with reliefs published by me,³ and is found on our Hadra vase No. 16, in the museum at Alexandria, in combination with an ornamentation of vines which cannot be separated from that of the pediment of the siren sarcophagus from Memphis, now in Cairo;⁴ it belongs therefore to the first part of the time of the Ptolemies. Our specimen cannot then have been made as late as 217 B.C., an assumption for which no real reason can be found.

14. New York. Again, as in the case of No. 5, an *architheoros*: Anaxilaos, son of the Achaean Aristeus, from Dyme. Edge of mouth, neck, and handle, as usual. The rest of the decoration corresponds entirely to that of No. 9, which is four years earlier. On the shoulder is a frieze of arches.

15. New York. A Persian. The Egyptian name of the month is employed instead of the Macedonian. Néroutsos reckoned correctly by Ptolemy III (No. 38), P. Meyer (*l.c.* p. 13⁴⁵) by Philadelphus. The vase is advantageously distinguished from the others by its elegant shape and attractive

¹ *Arch. Anz.* 1902, p. 158, and *Heerwesen der Ptolemaeer*, p. 9²⁰.

² In the museum at Alexandria. Examples of the class: Wallis, *Egyptian Ceramic Art*, I, pp. 83, 178; F. von Bissing, *Fayencegefässe*, 18030 ff.; cf. *Arch. Anz.* 1909, p. 17, and *Calen. Reliefkeramik*, p. 7.

³ *Calen. Reliefkeramik*, p. 21, Fig. 4.

⁴ Watzinger, *Holzarkophage*, pp. 33 ff.

decoration. On the front are two dolphins, one at each side of a vine, at the back hanging garlands fastened together; instead of the net pattern an elegant serpentine line; round the shoulder a tassel ornament and a continuous spiral; round the neck a simple twig of leaves. Dolphins are frequent on Hadra vases¹ and also well known on Megarian bowls. For the garlands, compare the sarcophagus from Magdola which belongs, according to the papyri, to the third century (Watzinger, *l.c.* p. 34). The rosettes over the garlands also recur here, and the motive of the long sides—ox heads with branches—is employed also on Hadra vases.²

16. Alexandria. Probably to be restored *Αγορησεως* (Agoresus in Caria). *Αγοραστης* is impossible, since Philon held this office. Besides, this is the place for the reference to the place of origin. The ornamentation was mentioned under No. 13; an approximate idea of it is given by the publication of a similar example in Sieglin-Schreiber, *Die Nekropole von Kôm-esch-Schukâfa*, p. 160, Fig. 96a, from Cyprus. Neck, etc., decorated as usual.

17. Alexandria. No details are known to me.

18. Alexandria. *Néroutsos* 13. Referred to Philopator by M. Mayer (*l.c.* p. 13⁴⁵). I have no knowledge of the ornaments.

19. Cairo. *Néroutsos* 14, referred to Philopator. Again an officer, buried by Philon, cf. No. 13.

Neck: laurel band with blossom in the middle. Shoulder: "Spritzstreifen." Belly: at the back, under the vertical handle, a palmette ending at right and left in sprays of vine, framed in network. In front three palmettes side by side, below them a black stripe running round the vase (Watzinger).

20. Alexandria. An envoy from Cyzicus. On the neck the usual wreath; on the belly sprays of ivy.

21. New York. A Boeotian *theoros*. Theodotos, whom P. Meyer (*l.c.* p. 14) regarded also on occasion as a commander (on *Néroutsos* 21), again had charge of the burial. As on No. 15, the Egyptian name of the month is given.

¹ Cf. also the pottery of the western slope published by Watzinger, *l.c.*, and the Megarian bowls, *e.g.* that published by Zahn, *Jb. Arch. I.* XXIII, 1908, p. 61. The fragment of a Megarian bowl from Lesbos, black below and brown above, in Würzburg, has dolphins at the sides of a Corinthian column.

² Sieglin-Schreiber, I, p. 186, Fig. 118.

The decoration approaches very near to that of No. 14; the difference in date is only three years. On the shoulder a double frieze of arches; the somewhat more simply drawn sprays of ivy are here combined with the ornament of the wave pattern ("laufender Hund"); in place of network are serpentine lines, as on No. 15.

22, 23. The last two inscriptions require more detailed discussion.

Much has been written about the Sotion inscription since its first publication by Merriam. He connected it with the first proclamation of the Soteria, which he reckoned by the reign of Philadelphus, so that he reached the date 277-276 B.C. Dittenberger and Wilcken accepted his arguments, Néroutsos referred the inscription to the reign of Euergetes, and recently Boesch has chosen Philopator and dated the inscription in the year 213 B.C.¹ He is, however, not unaware that this involves a tearing asunder of our very closely connected series of vases, for Philopator reigned only seventeen years, while the inscriptions mention the twentieth and twenty-first years. The Sotion vase stands in very close connection with those that precede, not only on account of the name of Theodotos, but also by reason of the decoration, which points, as we have seen repeatedly, to the middle of the third century. All the elements are here grouped together: the familiar sprays of ivy, the network, the wavy band. About the neck and on the shoulder are twigs.

The other vase has been discussed still oftener, for on it the day of the month is given by the two calendars, Egyptian and Macedonian. The vase is dated by Merriam, Dittenberger, Blümner, Wilcken, and Strack in the year 277-276, by Néroutsos in 239, by Boesch in 213, by Preuner in 202-201, and by Beloch in 172; we have thus the choice of five Ptolemies and a period of more than a century.

The two vases belong together. To be sure, the ornament of the calendar vase is unusual,² but shape and decoration do not

¹ For references, see p. 388, note 1.

² It appears again in combination with wave pattern and sprays of ivy on No. 2559 of the National Museum at Athens. The palmettes projecting horizontally, with their several parts separated, recall like motives on Gnathia vases, e.g. Rayet-Collignon, *Hist. de la Céramique grecque*, p. 329, Fig 123, *Arch. Anz.* 1909, No. 35 (Figs. 1 and pl.); from Alexandria, Sieglin-Schreiber, I, pl. 66, 1.

differ from the others, and if we assume a different Ptolemy for each vase, the result is a purely arbitrary arrangement. The frequent recurrence of the names of Sarapion and Theodotos alone forbids us to separate the vases, which are closely bound together by uniform technique and ornament.

Weighty arguments have been adduced against dating the Sotion vase in the year 277-276. Against the year 239, which would best suit our order of development, the assumption that the Soteria were a penteteric festival and the year would not fit has told heretofore. But the Soteria were celebrated every third year,¹ so that nothing stands in the way of the year 239, and we know now also that the festival was proclaimed not once only, but periodically.² For all the reasons which I have tried to develop and express in this article, I must hold to the year 239 for the calendar vase also.

The chronological arrangement of our vases is not arbitrary. In the first place we have recognized with certainty that the series is uninterrupted, that its beginning and its end cannot be separated by more than a century. As the development now appears to us, it is bounded by the years 271 and 239 B.C. As a check on my results I asked Dr. Zahn without knowledge of the inscriptions to arrange the vases in accordance with his opinion concerning the development of the shape and the ornaments, and to my great pleasure I am able to state that I had to make only unimportant transpositions in order to bring my arrangement into agreement with his. We may accordingly reckon the vases with large numbers for the years by the reign of Ptolemy II (the decoration consists essentially of the simple sprays of ivy adopted from the Cabirium pottery), while the vases with the names of Theodotos and Philon and the smaller numbers for the years must belong to the time of Euergetes. The beginning of the confusion in the feeling for ornamental rhythm coincides with this time. I have more than once called attention to the pan from Egyed.

Nor is it permissible to descend with this whole class to the time of the next Ptolemies. We have seen that our hydriæ are developed from styles of the fourth century, that they cannot, with reference to the circumstances of discovery, be brought

¹ Beloch, *Griech. Gesch.* III², p. 415.

² Boesch, *Θεωπεία*, pp. 100 ff.

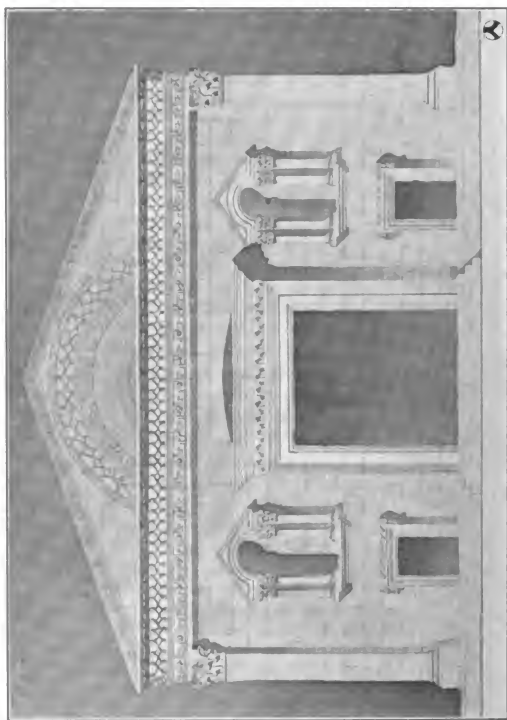
down much later than the middle of the third century, — the vases now in New York were found with coins of Philadelphus, — finally, all the parallel monuments, their decoration and their shape, point to the same time.

We have found that the time of the manufacture of our vases was the second and third quarters of the third century B.C. An exhaustive investigation of figured decoration also, which our vases lack almost entirely, would unfold many other interesting relations and add further confirmation to the dating we have established; but this we cannot undertake at present.

RUDOLF PAGENSTECHER.

HEIDELBERG.

CORRECTION. The inscription mentioned on page 408, note 3, is not, as there stated, on a Hadra vase, but on a fragment of a black-figured scyphus. — R. P.



THE TYCHAION AT IŞ-ŞANAMÊN — FRONT VIEW, RESTORED.

THE TYCHAION AT IŞ-SANAMÊN¹

[PLATE XIII]

THIS building is at Iş-Sanamên, ancient Aere, in the northern part of the plain of the Haurân, and has been frequently mentioned by travellers. It was a temple sacred to Tyche, the

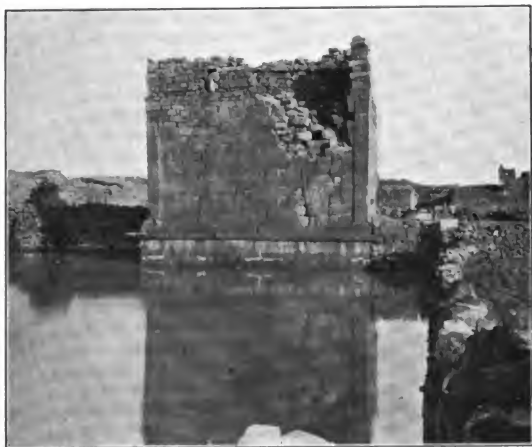


FIGURE 1. — THE TYCHAION AT IŞ-SANAMÊN.

goddess of fortune, a Tychaion, built in the twelfth year of the Emperor Commodus (192 A.D.), as we learn from a Greek

¹ Through the kindness of Professor Howard Crosby Butler, who has loaned me his notes and photographs taken on the American Archaeological Expedition to Syria, I have been able to make the restoration of the temple here presented.

inscription over the doorway.¹ The structure is in a fair state of preservation, having been used as a mosque until comparatively recent times. The front wall has been partially rebuilt and the great lintel has been reset at a lower level, while the apse or tribune has been filled up with rough stone. It is from photographs of these parts and from measurements taken

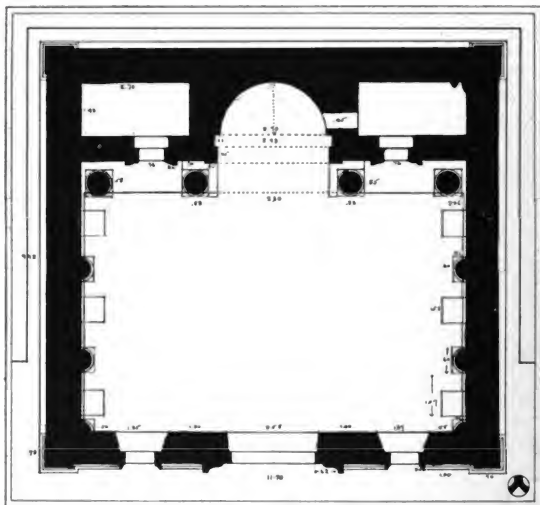


FIGURE 2. — PLAN OF TYCHAEON.

on the spot that this restoration has been attempted. The location of the building is particularly interesting, as the temple is surrounded on three sides (Fig. 1) by the waters of a large rectangular birkeh or reservoir, which was inclosed by a colonnade.

In plan the building is nearly square (Fig. 2) and is entered from the north end, where there are three doorways, a large

¹ Waddington, *Inscriptions grecques et latines de la Syrie*, 2413 f.; C.I.G., 4554.

portal between two smaller entrances. Opposite the entrance, that is at the south, is an apse or tribune with a small rectangular chamber on either side. The chambers are in two stories,



FIGURE 3. — INTERIOR OF TYCHAION.

both of which have doorways opening into the naos on either side of the apse. The floor of the apse is elevated above that of the main room, and a narrow doorway leads from the apse

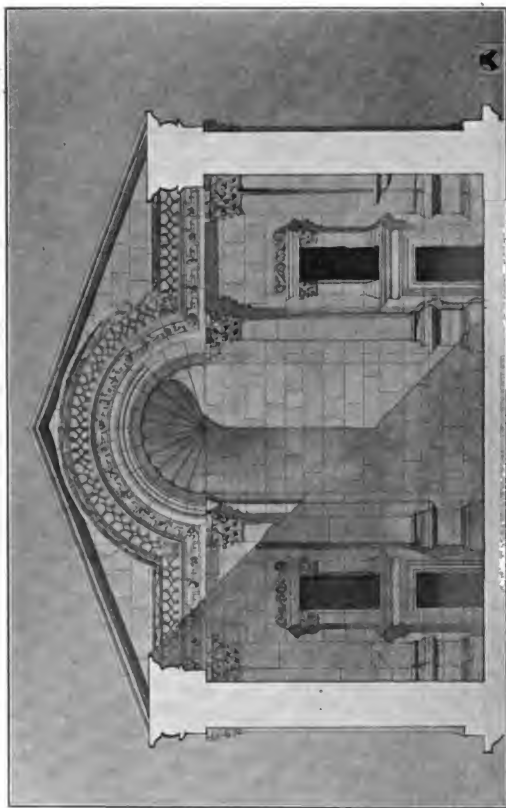


FIGURE 4. — CROSS-SECTION OF TYCHAION, RESTORED.

into the upper chamber on the west side. The apse is hidden from view on the exterior, being enclosed within the square of the temple plan; thus making the naos shorter from front to rear than from side to side.

Although comparatively plain on the exterior, the temple was wonderfully rich in interior decoration. An order of four Corinthian columns raised on pedestals stands free from the south wall (Figs. 3 and 4). The columns carry an entablature on either side above the openings of the side chambers, and support an arch, upon which the members of the entablature are carved, above the apse. Half columns, two on either side, are ranged along the side walls (Fig. 5) and quarter columns are placed in the northeast and northwest angles. These carry an entablature along the wall which reproduces the rich carving of that on the south wall. Brackets, for the support of statues, protrude from the wall between the half columns. There is no evidence to show that there were ever columns in the naos corresponding to the half columns on the side walls, and supporting arches in front of the apse and architraves on either side for the support of a stone roof. Moreover, if there had been some such arrangement of columns, there would probably have been in addition half columns on the north wall, corresponding to those on the south, to carry the arches and architrave across this face. Since, however, there are absolutely no signs of any such columns, it is probable that the naos had only this one interior order. In fact, the other arrangement would bring the arches so near together that the effect of the beautiful carving on them would have been lost. It is improbable that the building was roofed with wood, which at this period was becoming scarce in the Haurân,¹ and it is more than likely that the naos was left open to the sky, while a small roof was placed over the apse where the problem presented no difficulties (Fig. 6). Even if wooden girders had been used as the support of a roof, it is likely that the holes in which the ends of the beams were placed could still be seen. However, no such marks have been found, and this solution seems to be untenable. Although such

¹ De Vogüé, *La Syrie Centrale, Architecture civile et religieuse*, p. 6; Butler, *Architecture and Other Arts in Syria*, p. 11.

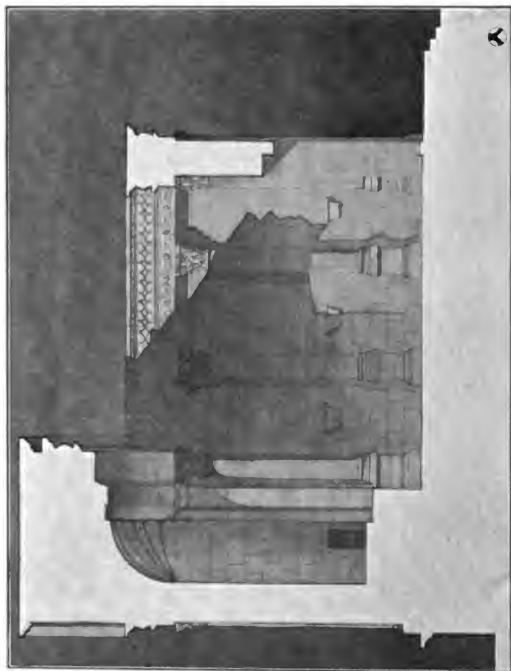


FIGURE 5.—CROSS-SECTION OF TYCHAION, RESTORED.

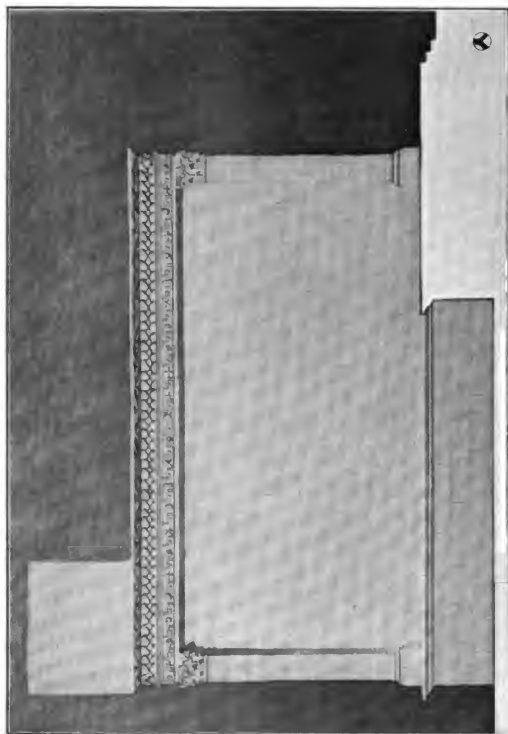


FIGURE 6. — SIDE VIEW OF TYCHAION, RESTORED.

a hypaethral temple is without precedent in Syria, it would seem to be the only solution admissible here, for all the other examples of temples of equal size have columns in the middle of the naos for the support of the roof. It is unlikely that the arches of the apse would have been left exposed to the action of the winds and the weather, when it was such a simple matter to place a roof over them, thus affording them protection and at the same time marking the temple conspicuously. The apse itself, which was practically a large niche, contained a statue which, according to an inscription high upon the curved wall, was gilded at the expense of one of the citizens of Aere.¹

Very probably the building was regarded merely as a wall to surround and protect the statue of the divinity. The architectural effect is heightened by the colonnade, remains of which can be seen surrounding the birkeh. A base moulding, consisting of a fillet above a large cyma recta, runs partially around the building, which is raised high in the rear to elevate it from the waters of the reservoir (Figs. 7 and 1) and breaks away from the wall to extend around the birkeh at a little more than half the distance from the rear end. There are four Corinthian pilasters at the angles of the temple, which support an entablature exactly similar in design to that of the interior. The bases of the pilasters are raised on a high plinth above which there is practically an Attic base, a scotia between two torus mouldings. The capitals are of good design, although several refinements are lacking, owing doubtless to the difficulty of carving the hard basalt. The entablature consists of a double-stepped architrave, on the upper part of which is carved a meander with various designs in the spaces. Unfortunately some of the carvings, probably the heads of pagan deities, have been hacked off by Christian or Mohammedan iconoclasts. The cymatium of the architrave consists of a small band of bead and reel, above which is an ovolo moulding carved with an egg and dart design, and over this a cavetto with a running foliate pattern. The frieze is pulvinated and carved with a single guilloche motive with flowers at the corners of the building and at the springing of the arch as it curves over

¹ Waddington, *op. cit.* 2413 h ; *C.I.G.* 4656.

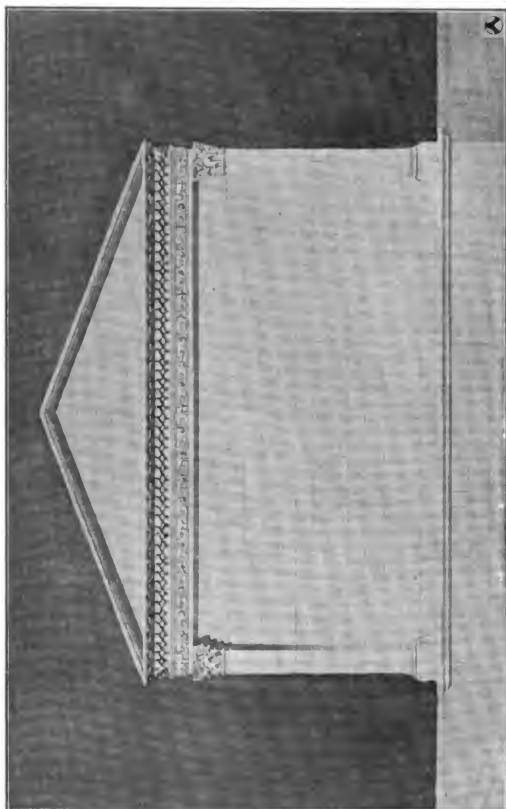


FIGURE 7. — REAR VIEW OF TYCHAION, RESTORED.

the apse. Above this the cornice is gone and the cyma recta and fillet are entirely conjectural, although there is evidence for them from ruins at other places in Syria, notably in the temples at 'Atil and Mushennef.¹ The foliate design on the cornice was commonly used, and it is improbable that this member would have been left plain, as the entablature is so



FIGURE 8. — DETAILS BUILT INTO WALL.

rich in decoration elsewhere. The gable roof at the south or apse end has also been assumed from these examples.

The main doorway (PLATE I) is of fine design, consisting of a flat moulding capped by an inverted egg and dart. This is surmounted by a small fillet, above which is a large pulvinated member which is covered by an inscription. Over this is another fillet, above which is a finely cut leaf and tongue, which in turn is surmounted by a plain band. Over this is a small bead and reel, with three beads touching one another, an ovolo carved with an egg and dart, this time in its normal position, and above this is a cavetto with a foliate design capped

¹ Butler, *op. cit.* pp. 345 and 349; Ward, *A.J.A.* XI, 1907, p. 4.

by a plain fillet. All these mouldings are returned at the sides of the doorway as supporting members for the lintel. The crowning members over the lintel have been assumed, but there is evidence for them. On the portal of the eastern basilica in the Serâyâ at ẖanawât and also in the doorway of the so-called Philippeion at Shehbâ¹ such an arrangement can be



FIGURE 9. — MOULDINGS FROM A CROWNING MEMBER.

seen. Immediately above the lintel in its present position (Fig. 8) are the fragments of three acanthus leaves which very probably formed the lower moulding of some such crowning member. These mouldings are so interesting that I have made a drawing at a larger scale than was possible in the elevation (Fig. 9). The relieving arch over the doorway is such a common feature in Syrian architecture that it is safe to assume

¹ Butler, *op. cit.* pp. 360 and 381.

it here. On either side of the main portal are two smaller doorways which are hardly large enough to have served more than an ornamental purpose. The mouldings are plain, and at either side of the lintel are two consoles or parotids which have no other than a decorative function. Above these doorways so much of the north end has been rebuilt that it is impossible to know exactly what the ornament was. However, in the photograph (Fig. 8) the remains of two small coupled and engaged colonnettes can be seen which must have been the supporting members for an entablature over a small niche. The restoration of this niche has been based chiefly on that in the east façade of the basilica at Shakka.¹

The columns of the interior, as has been stated, are raised on pedestals which consist of a base, a die, and a cap. The shafts of the columns are built up in drums of varying heights and show both entasis and diminution. The entablature is similar to that of the exterior, which has been described in detail. Between the columns at the south end and on either side of the apse are the entrances to the side chambers. The mouldings of the doorways are of simple design. Above them and resting upon them is a pulvinated member which is carved with a foliate pattern. This is crowned by a cavetto with fillets and a cyma recta. These mouldings act as the support for two small pilasters which flank the doorways of the upper chambers. The pilasters are well executed and carry a triple-banded architrave capped by a cornice moulding. Above this is a double scroll with flowers in the spaces.

The temple was built throughout of black basalt in blocks of various sizes and sometimes of different heights, but finely cut and laid dry. Although it has been somewhat destroyed by its later occupants, much of the original beauty and charm remain. It is perhaps worthy of note that in plan the general outlines strikingly resemble those of the great Christian basilicas which followed it in the West.

LOUIS CURTISS CUMMINGS.

PRINCETON UNIVERSITY,
May, 1909.

¹ Butler, *op. cit.* p. 367 ; De Vogüé, *op. cit.* pl. 15.

A FRAGMENT OF A PAINTED PITHOS FROM CNOSSUS

SOUTH of the palace precinct at Cnossus there are several heaps of discarded potsherds which the English excavators generously put at the disposal of those interested. In cleaning and assorting some specimens which I recently procured in this way for the Archaeological Museum at Yale University,

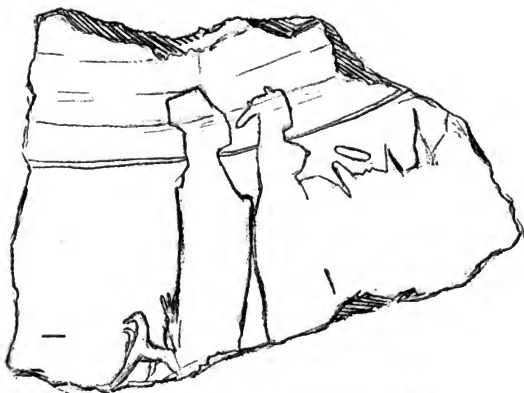


FIGURE 1.—FRAGMENT OF PITHOS FROM CNOSSUS.

I noticed that one of the fragments, which was handmade, was covered with stucco and still shows traces of painting. The clay is a dull red with a sprinkling of black specks. The fragment, which is 0.19 m. long, 0.12 m. high, and varying from 0.01 m. to 0.023 m. in thickness, still retains 0.01 m. of

the lip of the vase, otherwise it presents no smooth edge. A horizontal relief-band, 0.025 m. broad and projecting 0.005 m. at its highest point, encircled the vase 0.035 m. below the rim. Judging from the thickness and gradual curve of the fragment (see Fig. 2), the vase must have been a pithos.

From the accompanying outline sketch (Fig. 1), for which I am indebted to Mr. John D. Whiting, it is clear that two



FIGURE 2.—VERTICAL SECTION OF FRAGMENT.

female figures with their arms concealed in their long garments are walking to the right, approaching some plants. Their heads are painted on the relief-band, their feet are broken away. The first figure is 0.08 m., the second 0.09 m. high. They are roughly painted in silhouette without any details; not even the eyes are indicated. The slip is yellowish gray, the figures a dull brown and in some places black. The foremost figure represents the well-known Minoan type of goddess with exaggerated uncovered breasts, and wears a peculiar flat headdress which projects behind her head. An unknown object about the shape of a grain of wheat hovers in the air above the plants in front of her. The second goddess, who follows close behind the first, wears a high headdress similar to that of Eileithyia on the black-figured vase-paintings. She is accompanied by an animal, perhaps a lioness, to the left, lifting the right forepaw. There are no traces of other figures to the left, but let us hope that fragments of the same pithos may be found at Cnossus with figures to the right of the plants. Until then it will be difficult to attempt any explanation of the subject.

So far as I know, pre-Mycenaean pithoi with human figures painted on stucco have not been noticed by the excavators in Crete, but it is probable that on thorough examination other examples of this class of pottery will be brought to light.

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THE SO-CALLED MOURNING ATHENA¹

It may be permissible to add one more to the theories entertained about that beautiful relief in the Acropolis Museum at Athens, now widely known as the "Mourning Athena" (Fig. 1). In Volume VI of the *American Journal of Archaeology* Mr. Arthur Fairbanks published an excellent article on the subject, which serves as a natural point of departure for a new discussion.

Mr. Fairbanks proposes for this relief the assumption that the sculptor copied the figure of Athena from some famous statue in the round.² He assents to Graef's view³ that the style is that of the Attic School of the early fifth century under strong Peloponnesian influence, and supposes the



FIGURE 1. — THE "MOURNING ATHENA."

¹ See *A.J.A.* VI, pp. 410 ff.; *Monuments Piot*, III, pp. 5 ff.; *Μνημεία τῆς Ἑλλάδος*, I, p. 1; *J.H.S.* X, p. 267; *Ath. Mitt.* XV, pp. 22 ff.

² He finds precedent in the application of a similar assumption to the Eleusinian Relief in the National Museum at Athens. See Roscher, *Lexikon*, II, 1349 ff.

³ *Ath. Mitt.* XV, pp. 22 ff.

original to have been a statue of the type of the Vesta Giustiniani. The inclination of the head, he thinks, may have been original, or it may be part of the adaptation. To the "received opinion" that the pillar, toward which the goddess bends her head, represents an inscribed stele,¹ Mr. Fairbanks raises the objection that a pillar of this type is very rarely² used for inscriptions. Lechat's³ theory that Athena is looking at a figure originally painted, not carved, on the top of the pillar, representing Erichthonius as a serpent issuing from a cista, Fairbanks finds weak, in that there is "no analogy for a column without some sort of capital on which the cista might rest." He follows Graef in believing that the bowed head denotes gracious goodwill rather than mourning. The new interpretation which he proposes is in his explanation of the pillar, which he takes to be the meta or goal-post, the symbol of the palaestra. This type of pillar on vases, he says, "ordinarily denotes the meta." He cites four instances⁴ and adds "that the goddess of the Academy and of the Panathenaea should be thought of as presiding over the palaestra, is at Athens not at all unnatural." He then goes on to publish a lecythus with white slip, one of those found in Euboea, 1880-90, now in the National Museum at Athens, 1968 (960). The figure painted on this — an Athena, bare-headed, wearing the aegis, resting on her spear advanced in her left hand, and holding herself in a pose very like that of the goddess in our relief — may give some slight support to the theory which he states in his first paragraph, that the relief is an adaptation from a statue in the round.⁵ This series of vases may be dated somewhere near the middle of the fifth

¹ Inscribed with names of dead Athenians, over whom Athena is mourning, *J.H.S.* X, 267; with Athenian treasury accounts, in which the patron divinity feels interest, *Ath. Mitt.* XV, pp. 24 ff.

² Graef cites only one instance. ³ *Monuments Piot*, III, pp. 5 ff.

⁴ *Munich Cat.* Jahn, 199; *Btsh. Mus. Cat.* III, E. 389, cf. E. 631; Gerhard, *Aus. Vas.* 131; Roulez, *Vases peints de Leyde*, pl. XVII, 2.

⁵ Mr. Fairbanks argues mainly from inconsistencies in treatment in the relief, following the principles applied to the Eleusinian Relief in the National Museum at Athens. The evidence furnished by this vase belongs to such a train of reasoning. There was (it has now disappeared) in the museum at Argos an adapted copy in relief of the Doryphorus of Polyclitus. See Collignon, *Histoire de la Sculpture Grecque*, Vol. I, 1892, p. 491, where an illustration accompanies the text. Mr. Fairbanks might have strengthened his argument by citing this.

century B.C. Fairbanks holds that the vase-painter and the maker of the relief worked at about the same time, each deriving his inspiration from a famous free-standing statue which belonged to the period of Peloponnesian influence on Athenian sculpture. Thus he accounts for the archaic character of the relief. It should be noted that, in the scene depicted on the lecythus, a tall, slender "temple column" appears behind the goddess. In this Fairbanks sees a suggestion that the original was a temple statue.

That the "Mourning Athena" is an adaptation in relief of some famous statue executed in the early years of the fifth century B.C. certainly seems probable. I agree with Graef and Fairbanks in believing that Athena is here not represented as sorrowful. But, after making the admission with Fairbanks that the pillar in the relief is neither an inscribed stele nor a column originally surmounted by a painted figure, is it possible to believe with him that this is the meta? Granted that this form of pillar "ordinarily denotes the meta . . . on vases,"¹ does not the unwonted connection of Athena with the palaestra, even in her beloved Athens, make as "large demands on the imagination" as Lechat's view, or Graef's, or E. A. Gardner's?

The theory which I propose involves no overt short-hand symbolism. The pillar does not stand for Athenian dead, Athenian wealth, or Athenian athletes. Symbolism, however, which looks back to the dim past out of which Hellenic civilization grew, may be found here, according to my theory, which explains the pillar as the aniconic representation of Athena.

It is necessary, then, to prove that a pillar is frequently associated with the figure of Athena in Greek art.

1. Varvakeion statuette of Athena Parthenos, National Museum at Athens (Fig. 2).²

The presence of a pillar here, in the shape of an unfluted Doric column on which the goddess rests her right hand, is important, inasmuch as it gives reason to believe that such a column was similarly placed in the chryselephantine statue by Phidias. The argument, long since familiar, runs as follows:³ This Varvakeion statuette, dating probably from the

¹ Fairbanks cites only four examples.

² Stais, *Cat. No. 129.*

³ See Collignon, *Histoire de la Sculpture Grecque*, I, pp. 546 and 547.

second century A.D., is generally admitted to be a most unimaginative, but, so far as its size allows, faithful copy of its famous original. Therefore we may infer that the copyist had



FIGURE 2. — THE VARVAKEION
ATHENA.

authority for this column. Neither Pausanias¹ nor Pliny² mentions such a detail; but this objection need not weigh heavily, for neither of those descriptions is exhaustively complete, nor does the one adequately supplement the other. The point which is urged to the best advantage by those who are unwilling to regard the column as a part of the conception of Phidias, is one of aesthetics. They deny to the column any other function than that of furnishing support to the outstretched arm strained with the weight of the Nike figure. Therefore they maintain that the column — whose appearance here argues its presence in the statue copied — was added to the great cult statue at some time after its completion, when repairs had become necessary. To this objection it may be replied that this is not the only copy of the Parthenos statue which shows the column. It appears also on :

(1) An Attic bas-relief of Athena Parthenos from the fourth century B.C., in the Berlin Museum.³

(2) An Athenian lead tessera on which is Athena Parthenos.⁴ On a coin from Cilicia, of the fourth century B.C., bearing as type this figure, the column is replaced by a tree-trunk, showing, according to Collignon, misconception of its meaning.⁵

¹ Paus. I, 24, 6.

² Plin. N.H. 36, 18.

³ Schoene, *Griechische Reliefs*, p. 44.

⁴ Von Sallet, *Zeitschrift für Numismatik*, 1882, p. 152.

⁵ Collignon thinks of the column only as a support for the hand.

(3) An engraved gem (Fig. 3) in the British Museum.¹ The late Mr. A. S. Murray² considered the evidence of this gem an important contribution to the argument that a pillar was present in the Athena Parthenos statue by Phidias. The intaglio design on the gem represents that type of the goddess. Beneath the hand on which Nike is borne is a pillar or cippus, so short that it furnishes no support whatever. On this pillar is perched Athena's owl. Even so, cippus and owl together do not reach as high as the outstretched hand. Murray believes that the owl and cippus "we must retain as part of the original design of Phidias, and as probably being the source of the pillar which the copyist has introduced into the Varvakeion statuette." He does not suggest any meaning for this cippus.³



FIGURE 3. — ENGRAVED GEM.

We have, then, from four sources monumental evidence of the presence of a pillar in the Athena Parthenos statue.⁴ There remains an important piece of literary evidence to consider. Plutarch remarks in his *Life of Pericles*, XIII: ⁵ Φειδίας τούτου [τοῦ ἔδους] δημιουργὸς ἐν τῇ στήλῃ ἀναγράφεται. What is this στήλη? Is this the mysterious στήλη which is mentioned in two inscriptions dated 385-4 B.C.: ⁶ ἡ στήλη ἡ χαλκῇ ἡ ἐν τῷ Παρθενῶνι, and Ἐκατομ[πέδῳ ἐντελὲς [κα]τὰ τὴν στήλῃν τὴν

¹ A. S. Murray, *Sculptures of the Parthenon*, 1903, pl. XV. Collignon does not cite this gem.

² *Op. cit.* pp. 136-138.

³ Murray's theory given above he offers as an alternative to the opinion that the column in the Varvakeion statuette is a conventionalized olive tree, used for support to the hand.

⁴ It may be a point worthy of note that in no extant copy of the chryselephantine statue of Zeus at Olympia does a column appear, although the technical problem of support for the hand bearing a figure was the same as in the Athena statue. Of serious warping in this Zeus statue we have evidence from the commission to repair it which Damaphon of Messene received. The argument may not be pressed, for monumental sources for the study of this statue are few.

⁵ See *Rheinisches Museum*, 1883, p. 311.

⁶ These inscriptions are cited by Jahn and Michaelis in *Arx Athenarum*. They are published: (1) *C.I.A.* II, 667, 5; (2) *C.I.A.* II, 670, 7.

χαλκῆν]? Certainly it seems reasonable to suppose that Phidias put his signature on some portion of his statue rather than on some bronze pillar or tablet in the "Parthenon" or "Hecatompedon."¹ As our column may properly be termed a *στήλη*, it is tempting to believe that it was on this column in his statue that Phidias put his name.

Does this argument as outlined lead us to believe that a column belonged to the original Athena Parthenos from the

hand of Phidias? If it may be proved that a pillar is of ancient cult significance, what more fitting than that it should have had a place in this statue, which was adorned with every conceivable symbol of the worship of the goddess?² I believe that in the Athena Parthenos by Phidias there was a column placed, not for purposes of support, beneath the outstretched right hand. A pillar in columnar form is found in four copies of the Athena Parthenos statue: 1. Varvakeion statuette; 2. Attic fourth century bas-relief; 3. Athenian tessera; 4. Greek gem with intaglio design.



FIGURE 4. — ATTIC RELIEF.

It will be seen by the list, as continued below, that the pillar is not confined to monuments of the Parthenos type.

5. Pentelic marble relief, Athena Nike, Lansdowne House (Fig. 4).³

¹ The meaning of these words does not here concern us.

² A. S. Murray, *op. cit.* p. 138, retains the owl on the cippus as a detail in the original statue.

³ Michaelis, *Ancient Marbles in Great Britain*, 1882, Lansdowne, 59.

This relief, in which Farnell,¹ like Michaelis, recognizes an Athena Nike, yields us valuable evidence. The exquisite carving and modelling of the marble bear the characteristics of Attic relief work of the early years of the fourth century. The goddess is shown in profile, facing toward the right of the field. She stands resting her right hand on her hip. Bare-headed she is gazing thoughtfully at her helmet, held in her left hand. Leaning against her left knee is her shield, behind which stands a pillar or post, not waist-high, adorned with a simple Doric capital. The shaft is partially concealed by the shield, so that it is difficult to make out whether the pillar is square or circular in section. It is more probably the former. On this pillar an owl perches. In the extreme right of the field is an olive tree, represented by thin, twisted branches extending to some height. The presence of a pillar in this relief is, as previously stated, remarkably interesting. It stands quite apart from the figure of the goddess. Therefore there is not the slightest possibility that, in some free-standing statue which the maker of this relief may have copied, the pillar had any kind of supporting function. Nor did the artist intend it for a conventional representation of the olive tree, for that gift of Athena appears in its natural form beside the pillar. The point is not to be evaded. Here the pillar, like helmet, shield, olive, and owl, is manifestly an attribute.

6. Roman medallion of Commodus (Fig. 5).²

On this medallion appear the branching olive tree and the owl perching on a pillar. Athena, in her Doric chiton, wears her helmet and carries her shield on her left arm, her spear in her left hand. As she strides off to the right of the field, she flings out her right arm toward the left of the field and gazes in that direction. By her left knee is a low altar. To her right, in the left of the field, is the pillar, a round column



FIGURE 5. — ROMAN MEDALLION.

¹ L. R. Farnell, *Cults of the Greek States*, 1896, Vol. I, p. 347, pl. XVI.

² Imhoof-Blumer and Gardner, *Numismatic Commentary on Pausanias*, pl. Z, XIII.

or post, on which her owl sits. Further to the left, beyond the pillar, is the olive tree. This coin-type is by some associated with the eastern pediment of the Parthenon, by others, with the western.¹ Miss Jane Harrison, in commenting² on the relief, points out the general likeness of the Athena, especially in pose, to the statuette in the National Museum at Athens known as the Epidaurus Athena statuette.³ The Athena on this medallion differs widely from the pensive bare-headed Athena Nike in Lansdowne House. But here as there the pillar is a conspicuous detail. Here as there it is impossible to account for it as an architectonic accessory in a statue or as a conventionalized olive tree.

7. Coin of Athens showing Athena Nikephoros (Fig. 6).⁴

The same pillar and owl appear on a coin of Athens of a class which, according to Furtwängler in Roscher's *Lexicon*, s.v. Athene, originated in the fourth century. Athena stands to the right of the field, in profile, her right side turned toward the spectator. She is clad in the usual Doric chiton, wears her helmet, in her right hand bears Nike, in her left the spear. In front of her, to the right of the field, is coiled her serpent. Behind her is the pillar surmounted by the owl. Of this class of figures, the Athena Nikephoros type, there is an example in the Pallas of Velletri in the Louvre.



FIGURE 6.
ATHENIAN COIN.

8. Series of Panathenaic Amphorae (Fig. 7).

The bird on the pillar at once suggests the famous series of Panathenaic prize vases. Uniformly on Panathenaic amphorae Athena Promachos is shown on the obverse panel advancing to the left. On either side of her, except in the earliest examples, is a slender Doric column, as tall as the goddess herself, surmounted usually by a cock. Sometimes, however, in place of the cock appears a sphinx, a panther, a siren, or a vase. In the fourth century we find Triptolemus in his car, or Nike,

¹ For bibliography see Imhoof-Blumer and Gardner, *op. cit.* p. 130.

² Harrison and Verrall, *Mythology and Monuments of Ancient Athens*, 1890, pp. 442 ff., Fig. 45.

³ *Ibid.*, Fig. 23.

⁴ Imhoof-Blumer and Gardner, *op. cit.* pl. AA, I, p. 133.

occupying this position on the column. These symbolic figures remove the possibility of explaining the two columns here, as elsewhere in vase-painting, as a means of indicating a temple structure. The cock, which usually surmounts the columns, has been explained as the bird of the games.¹ This is hardly satisfactory. Certainly the cock was a common votive offering among the Greeks.² Furthermore we meet him in the cult of Asclepius.³ And if the cock symbolizes the Panathenaic Games, ought not sphinx, panther, siren, Triptolemus, Nike, or vase to serve a similar purpose? On the contrary, these figures seem to have cult significance. It looks as if this Athena had been originally, as Miss Harrison suggests,⁴ simply a localized development of an ancient nature goddess. At any rate these pillars deserve a place in our list. It will be found that the difficulty raised by two pillars in place of one is unimportant.

9. *Lecythus*. National Museum, Athens, 1968.

The vase which Mr. Fairbanks, quoted above, publishes in support of his theory concerning the "Mourning Athena" relief may or may not belong in this list. On this *lecythus*⁵



FIGURE 7. — PANATHENAIC AMPHORA.

¹ See H. B. Walters, *History of Ancient Pottery*, 1905, Vol. I, p. 390.

² W. H. D. Rouse, *Greek Votive Offerings*, 1902, *passim*.

³ *Ibid.*, 204, 297.

⁴ J. E. Harrison, *Prolegomena to the Study of Greek Religion*, 1903, p. 301.

⁵ See *A.J.A.* VI, p. 413, Fig. 2.

there is behind the Athena figure a single slender Doric column as lofty as the two columns on the Panathenaic amphorae. Mr. Fairbanks says,¹ "The column is a familiar convention of the vase painter to indicate a temple and suggests that we are dealing with a temple statue." This may be very true. At the same time it is unusual to find a column on a vase with a single figure. Be this as it may, too much importance is not to be attached to the evidence of this vase in this particular. It is cited here, since the previous discussion of the vase raises the question.

10. Gem representing Athena and Zeus.²

This gem Farnell cites³ in illustration of the Athena Hygieia type. He remarks that, while it is a very inferior representation, it "seems to be trustworthy." The slight doubt implied in this statement makes it desirable to use the gem with caution. Before a seated Zeus figure stands a woman, helmeted, clad in Doric chiton. On her right hand, outstretched as in the Parthenos and Nikephoros types, is balanced the snake of Hygieia. Beneath the arm is a plain Doric column.

It would seem that in the preceding passages examples have been given in sufficient number to make profitable an investigation of this pillar which appears on these Athena monuments. A pillar has been found with the following types of this goddess:—

1. Athena Parthenos.
2. Athena Nike.
3. Running Athena—connected with pediments of Parthenon.
4. Athena Nikephoros.
5. Athena Promachos.
6. Athena Hygieia.
7. "Mourning" Athena.

This pillar has been seen to be an attribute of the goddess, not an architectonic detail or a conventionalized tree. It is probably significant that with it are associated various symbols of Athena,—the owl, sphinx, panther, serpent, vase, and Nike figure.

¹ *A.J.A.* VI, p. 415.

² Published by Müller-Wieseler, *Denkmäler der alten Kunst*, 2d ed., 2. no. 220.

³ Farnell, *Cults of the Greek States*, I, p. 347, pl. XVIII, C.

It is not unnatural to turn to the painted vases for some clew to the meaning of this pillar. Walters gives a list¹ of types of Athena which appear on Greek vases, of which series two² have bearings here: (1) Athena between two lions, on early vases; (2) Athena represented in xoanon form.

The first of these types finds a parallel in Mycenaean monuments, on which frequently a divinity appears adored or guarded by lions, arranged one on either side. The "Lions' Gateway" at Mycenae is a conspicuous example, if Dr. Arthur Evans has correctly traced the development of this group on Mycenaean monuments in his valuable article³ on "Mycenaean Tree and Pillar Cult." The existence of such a cult he proves by examples from extant remains. The process of development, he finds, seems to have been as follows: first comes the idea of the tree as the vehicle of divine presence. Then this sacred tree is conventionalized into a pillar, a baetylic form of deity, the "pillar of the house." The pillar is uniformly of that peculiar Mycenaean shape which is supposed to have been the ancestor of the Doric column. While one pillar is the rule in this cult, Evans has found examples of two, three, and more which are baetylic.⁴ Monsters appear in pairs in heraldic grouping with the pillar, as adorers or guardians—griffins, sphinxes, and lions. The next step is the substitution of the anthropomorphic form of divinity for the pillar. Here the pillar is shown to be bi-sexual, for it is replaced sometimes by a male divinity, sometimes by a female. The early Athena type in Greek vase-painting is parallel to this. In that case Athena is certainly little more than a form of that ancient woman divinity, whence Miss Harrison⁵ traces the various goddesses of the Greeks. In the pictorial process of change the god or goddess is finally represented in human form beside the sacred tree or pillar, which, at first, was the representation of deity.⁶ Evans says:⁷ "On cylinder seals of the Cypro-

¹ Walters, *op. cit.* II, pp. 39 and 40.

² The numbers are 11 and 21 in the series.

³ *J.H.S.* XXI, pp. 90-204.

⁴ Cf. two columns on Panathenaic amphorae.

⁵ See *Prolegomena*, ch. VI, "The Making of a Goddess."

⁶ On Prometheus and Pillar Cult, see J. E. Harrison in *R. Arch.* X, 1903, pp. 429-431.

⁷ *Op. cit.* p. 166.

Mycenaean class there is also a Lion Goddess. On an example from Salamis a seated female divinity holds in her left hand a bird, perhaps a dove, and places her right on a low pillar, representing her baetylic form, behind which is a rampant lion, who, resting one paw on the pillar idol, raises the other in the act of adoration."

Evans cites interesting parallels to this primitive cult among the Hebrews, and suggests that the ancient groups of stones in western Europe point to similar religious belief. Farnell¹ notes survivals of Tree and Pillar Cult in classical Greece and Italy:

1. Stone representing Thespian Eros.
2. Wood column representing Theban Dionysus.
3. Pillar in Apollo statues.
4. Omphalos of Apollo.
5. Two pillars of Arcadian Zeus on Mt. Lycaeon.
6. Square image of Zeus Neleios at Tegea.
7. Terminus at Rome.
8. Jupiter Lapis
9. Jupiter Fagutalis
10. Ficus Ruminialis.
11. Niger Lapis of Romulus.

} Graeco-Roman reliefs.

To this list we may well add Athena. Out of these dim beginnings before the Hellenic era she must have come with many symbols which once had to do with savagery — her aegis, her owl, serpent, griffins, and sphinxes. Her temenos of the sacred olive² near the Erechtheum seems to point to this tree cult, as does the offering of olive oil to her.³ And surely in this pillar we have her aniconic image. Tertullian bears witness to this when he says:⁴ "Quanto distinguitur a crucis stipite Pallas Attica et Ceres Raria quae sine effigie *rudi palo* et *informi ligno* prostant?" Doubtless by the fifth century the Greeks had forgotten, if they ever knew, Athena's ancestry. In her pillar the Athenians probably saw merely a symbol of her protection. As Pindar speaks of Hector⁵ as *Τροίας ἄμαχον ἀστραβῆν κίονα*, and as the pillar of the Lions' Gate at Mycenae

¹ *Cults of the Greek States*, I, pp. 13 ff., and *Arch. Rev.* II, pp. 167 ff.

² Cf. Evans, *J.H.S.* XXI, Fig. 2.

³ Evans cites an instance where a Mycenaean goddess partakes of the fruit of her sacred tree.

⁴ Tertullian, *Apolog.* 16.

⁵ *Ol.* II, 145.

was the pillar of the city's strength, so is Athena the ἀντίεισμα of her city.¹ How much of cult significance may be argued from the presence or absence of the pillar in any given statue may be beyond the possibilities of investigation.

The xoanon form of the goddess, mentioned by Walters as the twenty-first type in his list, is of frequent occurrence on the vases, where it represents an image or idol of the goddess. The word *xoanon*, as used here by Walters, denotes a statue which is a pillar or column on which the human head, arms, hands, and feet are indicated. Such a form marks the passing from the aniconic to the iconic stage in religion. It should be borne in mind that in the tale² of how Diomedes and Odysseus stole away the Palladium, the sacred xoanon of Troy, they were prompted to the theft by the knowledge that so they would deprive the city of its "luck." The pillar-like idol is the prop of the state. The Athena xoanon, as it appears on vases, is uniformly of the Polias type. On a red-figured lecythus in the National Museum at Athens³ appear both Athena and her xoanon. The scene depicted is the Judgment of Paris, where, curiously enough, the other two goddesses are not present. To a series of xoanon forms⁴ belong two representations of Athena, cited by Farnell,⁵ in which the lower part of the body is in Herm shape. These are a coin of Melos and a marble relief from Melos.⁶ Here, too, seems to belong that peculiar Spartan type, Athena of the Brazen House,⁷ a strangely conventionalized figure, suggesting at once not merely a xoanon, but the Mycenaean form of pillar with top of greater diameter than base.

It is now left⁸ to form some conjecture about the type of

¹ I merely apply Mr. Evans's thought to Athena.

² Cyclic Legend. Dictys Cret. 1, ch. 5; Dionys. Hal. 1, etc.

³ Collignon et Couve, *Cat.* no. 1942. Harrison, *Prolegomena*, p. 307.

⁴ Jahn, *De Minere. Simulac.* pp. 23-24, suggests that the trophy in some monuments of Athena Nike may be regarded as her *πέρας*, or rude image, a xoanon form. Farnell, *op. cit.* I, p. 339, sets this theory aside as being insufficiently proved by Jahn.

⁵ Farnell, *op. cit.* I, p. 338.

⁶ Jahn, *Jb. Arch. I.* 1893. Taf. 3, 7, and 8.

⁷ Farnell, *op. cit.* I, Coin Plate A, 23.

⁸ The investigation of the pillar raises several important questions. What was signified by the custom of offering votive pillars (see Rouse, *op. cit.* pp. 83, 94, 273, 342; Borrmann, in *Jb. Arch. I.* III, pp. 269 ff.) to Athena and other

Athena which we may suppose the artist of the "Mourning Athena" relief to have copied. Preliminary to this there are two words yet to be said about the pillar. First, it is necessary to distinguish sharply between the pillar as aniconic image and the conventionalized olive tree which sometimes appears as a tree-trunk.¹ The one form it is impossible to mistake for the other, but it is easy to confuse the meaning of the two. The ancient baetyl survives in the cult as a stone pillar. Granted that the baetyl itself had its origin in the reverence paid to a sacred tree² as the abode of deity or as deity, the baetyl means not tree, but divinity. It develops into the anthropomorphic image, beside which it often stands, whereas the branching tree-trunk in Athena monuments represents the tree, which came to be associated with the goddess by the process of development, whereby the divinity appears in the two forms, human and baetyl, beside a sacred tree. The monuments discussed above, which show both baetyl and olive tree, point the way to this important distinction. The pillar in the "Mourning Athena" relief is too uncompromisingly a *post* to be taken for a *tree*. The second word to be spoken is the statement that this ancient aniconic image, whose original meaning was lost in classical times, when it survived as a symbol, appears in several forms, — as Doric column, short or tall, as cippus, as unadorned post, and as a short post with a capital.

The study which I have attempted does not pretend to be exhaustive, but it is sufficiently complete to warrant some generalizations and inferences. If we review the types of Athena in which a pillar appears, we shall find that they are these: Parthenos and its cognate, Nikephoros; Nike; Hygieia; Promachos; while the ancient xoanon, the columnar image, is

deities, and of placing a pillar under votive tripods? (Rouse, *op. cit.* p. 156^b.) Is special meaning to be attached to the columns on which archaic female figures were mounted? Was it possibly religious, rather than artistic, feeling which prompted the use of *κόραες* in place of columns as supporting members in architecture? A bare formulation of such questions is all that may be attempted here.

¹ See above, Cilician coin cited by Collignon in studying Parthenos statue, published by Imhoof-Blumer and Gardner, *op. cit.* pl. Y, XXII.

² Deity in primitive times was conceived as residing in a sacred stone as often as in a sacred tree. The baetyl was probably often a meteorite.

best associated with the Polias type.¹ Farnell² takes the Parthenos by Phidias to have been the Polias under more peaceful aspect. The Nike,³ he says, is a kindred conception, although very differently expressed in art. Hygieia,⁴ he finds, was, in the two certain monuments⁵ which we have of that type, represented, not after a fashion corresponding to her unwarlike name, but as a martial goddess, armed in the usual way, charging in the front of battle. The running Athena on the Commodus medallion, a type associated, as we have seen, with the Parthenon pediments, is of this variety. The word Promachos speaks for itself. It is noteworthy that the antique *ἀγάλμα* on the Acropolis, the image generally called Polias, is also called Promachos⁶ and Poliouchos.⁷ It would seem then that the pillar belongs to those monuments wherein the type refers to Athena in her capacity of warder and defender of the city. And what shall we think of the Athena in our relief? She wears her helmet; therefore it is probable that this is not Nike.⁸ Athena Hygieia seems to have been one of the less common types of the goddess,⁹ and the extant copies of the type do not suggest this relief. The Parthenos of the artistic type created by the genius of Phidias is certainly not the subject of our relief. Quite as clearly this is not Athena Promachos. The figure in the relief is very simple and maidenly. Our Athena is a *κόρη*. She is that helmeted *κόρη* who is *ἡ Ἀθηναία κόρη*. But she is not in battle array. She does not wear the dread aegis, nor does she carry her shield. She leans pensively on her spear, while she looks down upon her people. And in a conspicuous position is a symbol of her divinity, not her serpent, nor her owl, nor her olive, but her own aniconic image which once meant "the pillar of the house." Who other than Athena was "the pillar of the house" of Athens? Truly this may well be an artistic type of Athena Polias or Poliouchos,

¹ See Jahn and Michaelis, *Arx Athenarum*, 1901, p. 68.

² *Op. cit.* I, p. 338.

³ *Op. cit.* I, pp. 338 ff.

⁴ *Op. cit.* I, pp. 346 ff.

⁵ (1) Athena Hygieia from Epidaurus, Nat. Mus. Athens, Harrison and Verrall, *op. cit.* Fig. 23; (2) ex-voto relief of Athena and Asclepius, Nat. Mus. Athens, published *B.C.H.* 1877, p. 164, no. 34.

⁶ Zos. 5, 6, 2. Possibly a blunder on the part of Zosimus.

⁷ Theodoret. *Græc. affect. cur.* 8, 30. Schol. Aristid. III, p. 657 D.

⁸ Farnell, *op. cit.* I, p. 341.

⁹ Farnell, *op. cit.* I, p. 348.

THE GROUP DEDICATED BY DAOCHUS AT
DELPHI

[PLATE XIV]

AMONG the discoveries of the French excavators at Delphi in the year 1894¹ was a long stone pedestal (Figs. 1, 2) facing to the south, situated on a high terrace behind and above the tripods of Gelon, and close by the precinct of the Thessalian



FIGURE 1.—PEDESTAL OF THESSALIAN GROUP, DELPHI, FROM EAST.

hero Neoptolemus. In its top are cut nine cavities to receive the plinths of marble statues (Fig. 1). Inscriptions on its face, under every cavity except the one at the east end, tell us that eight of the statues represented members of one Thessalian house. The unnamed head of the line may also have been

¹ *Gazette des Beaux Arts*, XII (1894), p. 452.

American Journal of Archaeology, Second Series. *Journal of the Archaeological Institute of America*, Vol. XIII (1909), No 4.



FIGURE 2. — PEDESTAL OF THESSALIAN GROUP, DELPHI, FROM SOUTHEAST.

a member, but the omission of its inscription is rather against such a supposition. The whole group was dedicated by the Daochus whose statue stood second from the west end; and Preuner's investigations have shown that it was in all probability a reproduction in marble of a group of bronze figures set up by Daochus in his home-city, Pharsalus.¹ Marble statues appropriate for the pedestal were found directly beside it, or to the south and southeast within a radius of about thirty metres. These were first published and discussed by Homolle in the *Bulletin de Correspondance Hellénique*, XXI (1897), pp. 592 ff. Later, the group having acquired new interest through the connection of one of its figures (the well-known Agias, Fig. 15) with Lysippus,² it was again more exhaustively treated in the *B.C.H.* XXIII (1899), pp. 421 ff. The purpose of the present paper, which is based on studies made at Delphi in the spring of 1908, is to discuss not the connection of the Agias with Lysippus, but the group as a whole, suggesting changes in the assign-

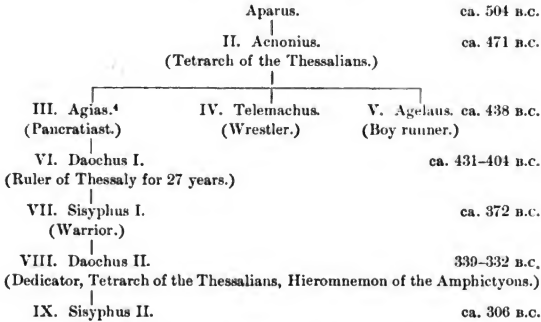
¹ Preuner, *Ein Delphisches Weihgeschenk*.

² Preuner, *op. cit.*

ment and arrangement of the figures, and offering a new restoration.¹

The inscriptions² show that the figures were arranged in order of descent, beginning at the right, and establish the following genealogy:³

I. Inscription lacking.



The group, therefore, consisted of three athletes, four statemen, the son of the dedicator, and one unknown figure. The statues and fragments of statues which Homolle assigns to the group and the positions in which he places them are as follows:

Cavity I.⁵ Nameless.—No statue was found to fit, but it was inferred from the size and shallowness of the cavity that the figure which stood here was draped to the feet.

Cavity II. Acnonius. — A plinth with booted feet attached

¹ The dimensions and a description of the pedestal are to be found in *B.C.H.* XXIII (1899), pp. 424-426.

² Published in *B.C.H.* XXI (1897), pp. 592-594.

* Generations have been calculated at 33 years each, not 30 years. Thus our dates differ from Homolle's.

⁴ May not Agias have won his Olympic victory in 490 B.C.? This is the only unfilled place in the Olympic lists between 480 and 448 B.C. After that date he could hardly have been an athlete and have had a son ruling Thessaly from 431 to 404 B.C.

^b See PLATE XIV and Fig. 1.

(Fig. 3) and a torso broken at the knees, neck, and shoulders.¹ The torso is draped in a tunic with short sleeves, over which is thrown a heavy cloak, draped on the right shoulder. The figure rested its weight about evenly on both feet; the right arm hung at the side; the left was raised and extended,



FIGURE 3. — PLINTH WITH FEET OF ACONIUS.

tossing the cloak up over the left shoulder and breaking its stiff surface into great harsh folds. The head seems to have been turned somewhat to the right.

Cavity III. Agias. — The statue² (Fig. 15) now famous from its connection with Lysippus: a nude youth somewhat shorter than Aconius, standing with the weight on the right leg, the left set easily at the side, and both arms hanging quietly. Only the left hand, the right forearm, and parts of the legs between calf and ankle are missing.

Cavity IV. Telemachus. — A torso (Fig. 4) which, in dimensions, agrees (within a centimetre) with the statue assigned to cavity III,³ and which in pose forms a pendant to it,⁴ the weight resting on the left leg, and the shoulders

¹ *Fouilles de Delphes*, pl. LXVI.

² *Ibid.* pl. LXIII.

	AGIAS	TORSO
³ Pit of neck to top of pubes	0.595 m.	0.587 m.
Between nipples	0.185 m.	0.190 m.
Breadth of hips	0.395 m.	0.395 m.

⁴ In the inscription Telemachus is called the *δωδέκατος* of Agias.

drooping to the right. The legs are broken off short at the thighs, but enough remains to persuade Homolle that he is justified in restoring the left foot advanced and the right drawn somewhat back. Head and arms are missing. A head (Figs. 10, 11, 12),¹ which was found not far from this torso and shows close affinities in style with the head of the Agias, he is deterred from connecting with this torso by its smaller proportions and the shape of the break at the neck. But he feels the desirability of finding a place for it in the group.

Cavity V. Agelaus. — A slight, youthful figure (Fig. 5) about 0.15 m. shorter than the Agias,² resting its weight on the right leg, the left (according to Homolle's interpretation) drawn back. It leans heavily with the left elbow on a bearded herm. Thus the right hip is thrust well out, giving the body something of the "Praxitelean" pose. The drapery that hangs from the left shoulder is rendered by a few clean-cut, vigorous folds. Missing are the head, the right arm, part of the left forearm, the left thigh and knee,³ the feet and plinth. From indications on the neck the head seems to have been turned somewhat to the left and to have drooped a little.



FIGURE 4. — TORSO FORMERLY ASSIGNED TO TELEMACHUS.

(By permission of Allnari Bros., Florence.)

¹ There connected with another torso.

² Restoring the head in proportion.

³ When Homolle wrote, nothing of the left leg had been found. Since then, the part from below the knee to the ankle has been identified and is exhibited with the figure.

Cavity VI. Daochus I.—A statue (Fig. 6) slightly smaller than the Aenonius, of which the head and neck, part of



FIGURE 5. — TELEMACHUS.
(Formerly called Agelaus.)

the feet and legs (shod like the other draped figures), and the torso with the arms. Missing are the head and neck (formerly a separate piece set into the torso), the right arm from just

the right shoulder, the finger-tips of the right hand, the right leg below the calf, the front half of the left foot, and the plinth are lost. Head and neck were originally of a separate piece of marble, as also the right arm, now broken away from the torso, in which the dowel-holes may still be seen. The figure stands about evenly on both feet. Its cloak, fastened on the right shoulder, enfolds the body like a sheath, barely indicating the outline of the left arm bent up across the breast. The right arm hung motionless at the side. High shoes were worn, similar to those worn by Aenonius.

Cavity VII. Sisypheus I.—A figure¹ of approximately the same height as the preceding, discovered in two pieces which fit by direct contact: the plinth with

¹ *Fouilles de Delphes*, pl. LXV.

below the elbow, and the left hand, both of which had been made separately and dowelled into place. The figure stands firmly on the right leg, drawing the left well back, and resting the left elbow lightly on a tree-trunk. The right arm was



FIGURE 6. — DAOCHUS I.

raised to the level of the shoulder. The costume is essentially that of Acnonius and Daochus I; but this time the cloak has been discarded and flung in a tumbled mass over the left arm, allowing full view of the tunic, whose soft material follows the contours of the flesh in little clinging folds as if wet.

Cavity VIII. Daochus II. — A plinth (Fig. 7) with a shod left foot and a bit of the right foot is all that is preserved. From this, however, it can be determined that the figure was



FIGURE 7.—PLINTH AND FEET OF DAOCHUS II.

draped¹ and stood with the left foot advanced and firmly planted, the right drawn back.

Cavity IX. Sisyphus II. — An heroic statue (Fig. 8) of a boy of fifteen or sixteen, complete except for the head, the right arm, and the left hand. In pose it is not unlike the Agias, save that a cloak hangs from the left shoulder, is wrapped around the bent left arm, and falls thence in long folds to below the knee, partly concealing the support on which the arm rests.

This statue Homolle includes in the group in its final state; but on account of its great size it could not, he thinks, have been a part of the original design. In point of fact, it overtops the next tallest figure, Acnonius, by a full head.² "A certain Roman roundness and indecision of rendering"³ he feels is accounted for by the immature age of the boy. He

¹ Boots would hardly have been worn by a nude figure.

² See restored drawing, Fig. 21 A. Measurement from pit of neck to plinth, in the case of Agias, 1.57 m.; of Sisyphus II, 1.91 m.

³ *B.C.H.* XXIII (1899), p. 461.

thinks, however, that the group as first planned consisted of seven figures, beginning with the Acononius and ending with the Daochus II; that to this was added, probably within a decade, the youthful son of the dedicator, and not much later its pendant at the other end. In the latter case the omission of the inscription would, he thinks, favor the theory of later addition.

In this group Homolle rather unsuccessfully attempts to discover a certain symmetry and unity, and to infer therefrom the principle of composition that lay in the minds of the sculptors. A fresh study of the material has led us to the conclusion that Homolle's arrangement of the figures is not altogether correct, and that the group can be materially improved by certain changes.



FIGURE 8. — SO-CALLED SISYPHUS II.
(From *Fouilles de Delphes*, pl. LXVIII.)

The figures were assigned to the group and to their individual positions in accordance with five criteria:

1. The place of finding.
2. The marble (which is Parian of a fine quality).
3. The size, style, and technique.
4. The costume.

5. The shapes of the plinths, or, where these were destroyed, the probable position of the feet.

The plinths of the statues assigned as Agias and Daochus II were actually found *in situ*, so that their identification cannot be questioned. In the case of the other figures the evidence is not so decisive and demands scrutiny.

The plinths of Acononius, Sisyphus I, and Sisyphus II are said to fit their cavities exactly. Where the first of these was found is not stated, but the torso to which it seems to belong

was lying near the east end of the pedestal, not far from cavity II, the position assumed for it. The Sisyphus I was found lying behind the pedestal, directly opposite the seventh cavity, to which it is assigned. But for the Sisyphus II the place of finding is less favorable evidence. It lay with statues and bases from other monuments on the low terrace south of the Thessalian pedestal, about twenty metres away.

For the remaining three statues no plinths were recovered. The statue assigned to the cavity of Daochus I (No. VI) was found not far from that cavity and is draped, like Acnonius, Sisyphus I, and Daochus II. Since Daochus I was a statesman, and the only other unfilled positions¹ belong to athletes, who may be assumed to have been nude, like the Agias, this draped figure can belong in no other place. Furthermore, the evenly balanced pose of the figure is exactly suited to the contour of the cavity.²

The statue of the youth leaning on a herm, identified as Agelaus (Fig. 5), was discovered at a considerable distance, in the northeast corner of the precinct of the temple of Apollo. The torso assigned to Telemachus (Fig. 4) and the head mentioned with it lay even farther off near the altar of the Chians. The youth with the herm is assigned to the group because of its style, which, though it belongs to a softer, more sensuous type than the Agias, is still in many respects similar. In the torso Homolle finds such striking similarities of dimensions, pose, and style to the Agias, that he is convinced that this must be the *ὁμάδελφος* required by the inscription. The so-called Agelaus rests its weight on the right leg, the Telemachus on the left; and if it is assumed, with Homolle, that the free leg in each case was drawn back, the proper pose for their respective cavities is obtained: for Agelaus the right foot forward, the left back; for Telemachus the reverse arrangement.³ By this arrangement, the strong vertical line of the herm is given to the central figure of the group.

With regard to the attribution of Acnonius, Daochus I, and Sisyphus I, there seems to be hardly less reason for accepting

¹ The first cavity is disregarded on account of its abnormal size, as will be shown more clearly later.

² See drawing, PLATE XIV.

³ See PLATE XIV, cavities IV and V.

Homolle's view than in the case of Agias and Daochus II. The second cavity (Aconius) measures 0.64 m. $\times$ 0.49 m.;¹ the assigned plinth measures 0.60 m. $\times$ 0.40 m. Of the other four cavities into which it might be set (I, VI, VII, and IX), I is altogether too large (0.765 m. $\times$ 0.57 m.);² VI and IX are too small (respectively 0.58 m. $\times$ 0.49 m. and 0.51 m. $\times$ 0.49 m.), and VII is quite the wrong shape (measures 0.62 m. $\times$ 0.50 m.; see PLATE XIV). Therefore, the plinth is properly attributed to Aconius. The attribution of the torso is justified on several grounds: it is the only statue besides the Agias found near the east end of the pedestal; the legs had the same pose (as shown by the stumps) as the feet on the plinth; the only other cavity adapted for a draped figure (statesman) standing evenly on both feet is VI (Daochus I),³ and for Daochus I another statue is more suited—that shown in Figure 6. The identification of this figure as Daochus I rests on three arguments. It is posed with the weight distributed evenly on both feet, hence adapted to the shape of the cavity; it was draped, hence appropriate for a statesman; it lay near the centre of the pedestal and so is more reasonably connected with cavity VI than would be the torso found near the east end. We may, therefore, follow Homolle in his assignment of both Aconius and Daochus I.

It is the shape of cavity VII (Sisyphus I) that prevents placing either of the preceding figures here. The requirements both of shape and size are filled by the statue which was discovered directly behind the cavity. Homolle is, therefore, undoubtedly correct in this attribution also.

We agree, therefore, with Homolle concerning the five figures Aconius, Agias, Daochus I, Sisyphus I, and Daochus II. His grounds for assigning the other three figures are less cogent and permit a new arrangement. In the case of Sisyphus II (Fig. 8), he himself found difficulties of style and proportion to explain. The theory which he builds up in order to do this

¹ Measures are taken on the bottom of each cavity, not on the upper edge.

² Since no other plinth discovered is as large as that of Aconius, this cavity would be even less adapted for the others and may be disregarded when they are under consideration.

³ Possibly IX, but the inscription suggests a younger, nude figure.

— that the group consisted at first of only seven figures (beginning with Aconius and ending with Daochus II), to which were added Sisypheus II almost immediately, and after a longer time the figure at the other end—he supports only by the absence of an inscription for the figure at the east end. This is hardly an argument in itself. Many other explanations could easily be offered to account for that fact. All that the hypothesis really rests on is the late style of the statue which he is convinced stood in cavity IX.

Granting for the moment the attribution, certain criticisms instantly suggest themselves. We are obliged to assume

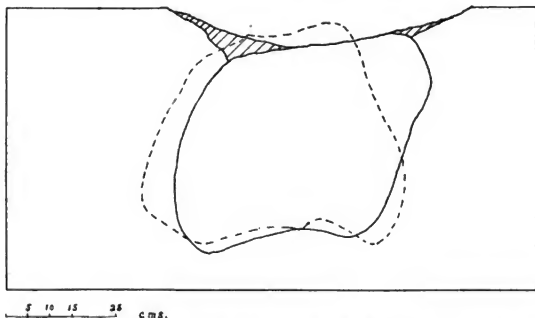


FIGURE 9.—BLOCK WITH CUTTING FOR PLINTH OF SISYPHEUS II. PLINTH OF SO-CALLED SISYPHEUS II. IN DOTTED OUTLINE.

that a Greek artist of the fourth century, one, according to Homolle, not remote in taste and training from the sculptor of the Agias,¹ could have produced a figure so flaccid and characterless, and could have set up the overgrown boy where he would tower above a line of dignified statesmen and victors in the great games, thereby destroying “without the artist’s realizing it” whatever principle of symmetry the group had once possessed. Nor are the positions of the second and eighth figures on their respective blocks appropriate for the ends of a group.

¹ *B.C.H.* XXIII (1899), p. 461.

They do not stand equally distant from the ends of their blocks. The centre of cavity II is 0.81 m. from the end of its block, of cavity VIII, only 0.51. Further, cavity II actually impinges on the adjacent block, whereas cavity VIII is cut entirely within its block.

However untenable his theory may be, Homolle is driven to it by the presence of such a figure within the group. Of its right there he has not the slightest doubt, because its plinth, as he affirms, fits exactly into cavity IX. But in this he is mistaken. The plinth could never by any possibility have been set within the cavity. The accompanying diagram (Fig. 9), based on carefully verified measurements, shows the true relation of the two. Not only are they quite different in shape, but the maximum length of the plinth is 0.07 m. greater than the length of the cavity. Consequently, the statue cannot possibly have stood in this position, and we are at liberty to explain the inferior style of the figure in the most natural way, — that it never belonged either to this group or to this period of sculpture, but was doubtless the work of a Roman portrait-sculptor some four centuries later.¹

The assignment of the Telemachus (Fig. 4) and the Agelaus (Fig. 5) causes less patent difficulties; yet here also a closer examination leads to conclusions quite different from those of Homolle.

The points of resemblance between the torso of the Telemachus and the Agias (on which its attribution was based), although striking at first sight, stop with externals of dimension and pose. In rendering, the torso shows different tendencies from its so-called *ὁμάδελφος*. The forms are heavier and rounder; the muscles seem like inelastic swellings beneath the skin; the outlines have not the firm crispness of the Agias. The variations, each by itself, are scarcely perceptible, yet, taken together, they produce an impression which repeated examination only deepens, that the fragment belongs to a rather uninteresting work of a period certainly later than the fourth century.

¹ We suggest that the statue belonged to the hemicyclical group to the west (dedicated by the Aetolians?), many of whose pedestals now lie on the spot where this statue was found.

Even had its style resembled closely that of the Agias, the figure ought not to have been set in the position of Telemachus, for it has not the correct pose. Homolle assumed that it stood with the left leg advanced and the right drawn back, the attitude suited to cavity IV. But from the stumps of the thighs and the position of the glutei, it appears that the right leg was the one advanced, and, consequently, required a plinth which could not have fitted the cavity. On grounds of pose and style, therefore, this torso should be removed from the group.

The statue identified as Agelaus seems at first sight less similar to the rest of the group than the preceding figure. In its general dreaminess of motive, in the suave transitions from plane to plane of the flesh, in the picturesque element added by the cloak, and in the delicately chiselled head of the herm it presents a marked contrast of mood to the Agias, who stands stripped of every least accessory, alert, clean-cut, revealing in every line the latent power of his frame. Yet the difference between them is not so great as to preclude kinship. For all his austerity, Agias, too, is tinged with the pathos of his age. The yearning intensity of his gaze differs alike from the quiet self-possession of the fifth century and from the banal absorption in the act of the moment that characterizes his Hellenistic successors. Moreover, in rendering, Agias and the figure with the herm show the same underlying traits. The latter is younger and less severely trained than the former; his muscles are less accentuated; their transitions are veiled under flesh, or, as in the case of the line down the inner edge of the calf (so characteristic of the Agias), disappear altogether. But both have the same firm yet supple contours, the same elastic quality in the flesh, the same texture (not satiny as in the Hermes at Olympia, nor dull and lifeless as in the rejected torso, but with something of the crystalline delicacy that one finds in Attic work of the late fifth and early fourth centuries); and the drapery, with its well-placed lines, its steadily modulated surfaces, betrays the same qualities as the nude form of the Agias. The subject is different; the artist's habit of thought is the same. A sculptor of like temper is revealed by only one other work of the fourth century at Delphi, and that, as will presently be seen, belongs to this group.

On considerations of style, then, the statue should be retained in the group; but not as Agelaus. It was assigned by Homolle to cavity V because of the supposed accord between the pose of the figure and the shape of the cavity, — which calls for a figure with the right foot forward, the left set back. He neglects, however, to consider the size of the cavity. Its greatest length is 0.49 m. The distance from the ankle of the right foot to the outer edge of the herm is 0.48 m., which, with the foot restored to give the least possible outward turn, demands a plinth of 0.52 m. length. This statue, therefore, cannot have been Agelaus. Nor can it have had a plinth of the peculiar shape required to fit cavity IX (Sisyphus II). The only place left for it is that of the Telemachus, whose cavity, if measured along the bottom, seems at first sight too small for it, being only 0.49 m. long. Unlike the other cavities, however, with their almost vertical walls, it has the east wall sloped inward



FIGURE 10. — FRONT VIEW OF NEW TORSO.
AGELAUS (?).

very gradually,¹ necessitating, if a plinth only 0.49 m. long were set in, an ugly amount of leading, or, if the usual leading was used, a larger plinth, bevelled off at this side. The latter

¹ Represented by the shaded portion on the diagram, PLATE XIV.

alternative seems far more likely, and permits the use of a plinth 0.53 m. or 0.54 m. in length, such as is required by the figure with the herm.

The pose required to fit the cavity — the left foot advanced in front of the right — is exactly the opposite of that assumed by Homolle for the figure in question. But for the given position of the glutei and what remains of the thighs, Homolle's restoration is not the only one possible. In fact, the left thigh seems to swing forward. This does not, indeed, compel a restoration with the left foot forward; for the supporting herm permits the figure to move the left thigh to the front, and yet, by bending the knee, to set the ball of the foot on the ground behind the other foot. At the same time it is just as possible for the foot to be forward in the direction indicated by the gluteus, and so suit the cavity of Telemachus. This new restoration is hinted at in Figure 5, where the fragment of the left leg has been set up with the figure.

Exception might be taken to this assignment, on the ground that so slight a figure with its gentle "Praxitelean" pose hardly suggests a wrestler, equal in strength to Agias. Yet a wrestler requires general lithe suppleness rather than particular development of any one set of muscles, and is, therefore, harder to characterize than a boxer or a discus-thrower. The two bronze wrestlers in the museum at Naples,¹ if wrestlers they are, though represented in actual combat, have bodies almost as smooth in texture and as youthful as our figure; while its attitude is paralleled by that of a youthful figure found at Tralles,² whose ear marks him as a pancratiast. Another parallel in pose is a terra-cotta from Lebadeia, representing a young athlete with a strigil.³ On the whole, therefore, the identification of this figure as Telemachus seems probable.

There remain, then, three cavities for which no statues have been found: I (nameless), V (Agelaus), IX (Sisyphus II).

Fresh material has, however, been discovered since Homolle

¹ Brunn-Bruckmann, *Denkmäler*, No. 354.

² Now in the museum at Constantinople, *Mon. Piot*, 1903, pl. IV, V. It is interesting to note that the costume of this youth is exactly that worn by the draped figures of our group, and that his legs have the same disproportionate heaviness as those of Sisyphus I and Daechus I.

³ Dumont et Chaplin, II, pl. XX.

published the group; and with this one of the cavities may be filled. It is the nude torso of a youth found April, 1907, built into a wall on the slope below the sacred precinct. Its dimen-



FIGURES 11, 12. —SIDE VIEWS OF NEW TORSO. AGELAUS (?).

sions are almost identical with those of our Telemachus.¹ The surface is badly corroded and reddened by the soil. The head

	TELEMACHUS	NEW FIGURE
¹ Pit of neck to top of pubes	0.54 m.	0.53 m.
Pit of neck to lower edge of breast	0.165 m.	0.17 m.
Distance between nipples	0.25 m.	0.235 m.
Length of thigh	0.53 m.	0.525 m.
Circumference of calf	0.378 m.	0.39 m.

and limbs were broken off at their junction with the body. The ephor of the district, Mr. Keramopoulos, immediately found that the neck fitted by actual contact the head mentioned on page 451, which Homolle had wished to associate with the group, although without success (Figs. 10, 11, 12). He also discovered in the storerooms of the museum a bent left leg (preserved in two pieces from the thigh to the ankle), which fits the torso



FIGURE 13. — LEGS OF NEW FIGURE.
AGELAUS (?)



FIGURE 14. — RIGHT LEG
OF AGELAUS (?), SHOW-
ING SUPPORT.

perfectly, again by contact (Figs. 13, 16). There is, besides, in the storeroom a right leg preserved from knee to ankle, so closely similar to the left leg in size, finish, and rendering of the muscles that there can be little doubt that it is the right leg of the statue (Figs. 13, 14).¹ Keramopoulos had expressed the opinion that the leg probably belonged to the statue, but had

	RIGHT LEG	LEFT LEG
¹ Circumference of calf	0.395 m.	0.39 m.
Circumference below knee	0.33 m.	0.321 m.

not measured it. Especially characteristic of both legs is the hard line down the inner edge of the calf-muscle, and the indication of the division between the muscles on the outside of the leg. Another significant point is the fact that joined to the right leg is an unusual form of support, — a mere strip of marble attached behind the foot and extending up the calf (Fig. 14). Exactly the same small, carefully concealed supports are used for the Daochus II (Fig. 7) and the Agias. (Fig. 15, back view of the Agias; the part immediately above the ankle is restored.) A search for parallels outside the Thessalian group has brought to light but one other instance of their use, — the "Apollo on the Omphalos."¹ The employment of such a support would seem to constitute at least one strong argument in favor of connecting the right leg, and through it the statue, with the Thessalian group.

There are also other arguments in favor of its inclusion. The dimensions, as has been indicated, are very close to those of the Telemachus. The head in its general proportions,² in the spareness of cheek, in the deep-set eyes, and in the treatment of hair shows close kinship with the Agias. Finally, the figure has the proper pose to fill the empty position of Agelaus, — the weight resting on the right leg, with the left drawn back and set a trifle to the side (Fig. 16).³ So



FIGURE 15. — AGIAS.

¹ Since this statue is generally conceded to be an early copy of a bronze of the fifth century, the likeness in supports used may throw light on the relation of the marble Agias at Delphi to the Lysippean bronze in Pharsalus.

² Characteristic are the long under part and the low forehead.

³ Owing to lack of proper machinery, the statue could not be photographed in an upright position with all the fragments in place. Consequently, only the torso and the legs appear in this illustration.

far as can be calculated from the fragments in their present state, the plinth would have been small enough to fit cavity V.

For the rest of the pose there are several indications. The left arm was raised at least to the level of the shoulder, as the position of the deltoid shows. The right may have hung at the side, yet the rendering of the muscles on the torso seems to indicate that it was raised, perhaps to place the hand on the hip. The left hand may have held a long staff, such as is illustrated in athletic scenes on the vases.¹ Thus the pose would correspond in general outline to that of the bronze in the Museo delle Terme (Helbig¹, 958). The staff would give the firm, upright line for the centre of the group which Homolle sought in the support of the Telemachus; while the figure itself, with upright torso and level shoulders, carries out the architectural idea far better than the Telemachus with its swinging curves.



FIGURE 16.—NEW TORSO (AGELAUS?) WITH LEGS IN POSITION.

In addition to the right leg of the Agelaus, two other fragments found in the storerooms of the museum may belong to this group. One is a right foot, broken off at the ankle and across the toes, but otherwise excellently preserved (Figs. 17, 18). The texture of the surface, the short, powerful build, the high arch of the instep, and the tension of the sinews, as well as the very characteristic rendering of the veins, recall the foot of the Agias. The veins are represented not by a raised welt on the flesh, but by a line of

¹ Gerhard, *Auserlesene Vasenbilder*, 244; *Arch. Zeit.* XXXVI (1878), pl. 11.

accent formed by the meeting of two planes at a decided angle. The bringing of a light plane against a shadowed one without transition produces the illusion of a darker line along the shadowed side of the contact, and a line of brighter light along the lighted side. Thus the relief of the vein is suggested with far more delicacy than could be done by actual modelling. The same



FIGURE 17. — MARBLE FOOT IN MUSEUM AT DELPHI. SIDE VIEW.



FIGURE 18. — MARBLE FOOT. FRONT VIEW.

device is employed on the foot of the Agias (Fig. 19). It is a natural conclusion, therefore, that the same sculptor made both, and possibly for the same group. But it would be hazardous to do more than suggest this. If it does belong to the group, it must be the foot of Sisyphus II, who would stand about evenly on both feet, with a little more weight on the left. The foot certainly belongs to a figure thus posed, for the outer edge is somewhat raised from the plinth, and the flesh below the ankle-bone is pressed out.

The second fragment is a piece of a right shoulder draped in an Ionic chiton, which in rendering is strikingly like the garment of

Sisyphus I (Fig. 20). It shows the same folds alternately clinging to the skin and breaking away from it, as if damp, and the same use of the rasp to give texture to the cloth.

At one end is a smooth joint-surface, to which the arm was attached, and a dowel-hole, a rectangular cut, exactly like



FIGURE 19. — RIGHT FOOT OF AGIAS.

those in the arms of Sisyphus I. At the opposite end it shows a concave surface roughly worked, as if for the insertion of the head, like those in the necks of Sisyphus I and Daochus I.



FIGURE 20. — FRAGMENT OF A RIGHT SHOULDER IN MUSEUM AT DELPHI. BACK VIEW.

It is proposed to assign this fragment to the figure standing in cavity I. Homolle is undoubtedly correct in his suggestion that the drapery of this statue reached to the feet, helping to support the figure and demanding a very large plinth. Such a figure might have been a woman, a goddess, Dionysus, or a priest of Dionysus. A mortal woman as head of a line of statesmen and athletes would be inappropriate; a mortal man,¹

¹ Aparus, father of Acnonius, has been suggested, but this attribution leaves unexplained the size of the cavity.

if enough were known about him to give him the garb of a priest, would surely have been honored by an inscription. Neither Dionysus nor a goddess needed an inscription. Their attributes would be sufficient identification.

The juxtaposition of deities and mortals was no uncommon thing. At Delphi alone they appear in the dedication of the Lacedaemonians after Aegospotami, in which Poseidon was crowning Lysander ;¹ in the dedication of the Athenians after Marathon, in which Athena appears with Miltiades ;² and in the group of Battus, Libya, and Cyrene.³ Dionysus is not especially appropriate as the head of this line ; but Athena is. She was the patron goddess of Pharsalus ; her image is the symbol chosen for the coins of the fifth and fourth centuries.⁴ Moreover, she is the only deity besides Apollo mentioned in the inscriptions on the pedestal. In the inscription under cavity VII she figures as the special protector of Sisyphus I, father of the dedicator of the monument.

In view of these facts, it does not seem too daring to suggest that an Athena headed the line. If she be restored holding a spear in her right hand and resting her left on a shield with her drapery falling about her feet, the unusual size of the cavity can be accounted for without assuming that she was of colossal proportions. At the same time the crest of her helmet would make her taller than the others, and so set her apart as a deity. To such a figure the shoulder-fragment may properly be attributed. One technical point seems to indicate that it really did belong to an Athena. The neck-cutting, referred to above, comes too far out on the shoulder to have received the head and neck alone. If it be supposed, however, that the aegis also was set in, then the extent of the cavity so far out on the shoulder is explained. It is clear that by supplying an Athena to fill cavity I, we gain an appropriate head for the line, a figure adapted to fill the extraordinarily large cutting, and an explanation of the omission of the inscription. Hence, on this assumption, Homolle's theory of a later addition of the two end figures, already weakened by the

¹ Paus. X, 9, 7.

² *Ibid.* 10, 2.

³ *Ibid.* 15, 6.

⁴ *Catalogue of Greek Coins in the British Museum. Thessaly to Aetolia*, p. 43, pl. IX.

rejection of his so-called Sisyphus II, loses the only remaining grounds he adduces for its support.

And yet, if the composition of the group be carefully studied, it will appear that his theory is not altogether without foundation, in so far as it relates to Sisyphus II. For if the plan of the top of the pedestal (PLATE XIV) be examined, and the cavity of Sisyphus II (No. IX) be disregarded, the perfect balance in position and outline between the others will at once be observed. It is a balance of pairs: Agelaus (V) with Telemachus (IV), Daochus I (VI) with Agias (III), Sisyphus I (VII) with Aconius (II), and Daochus II (VIII) with Athena (I).

The balance in shapes of the cavities means balance in pose of the statues. A glance at the restored drawing (Fig. 21 *B*)¹ will show the system on which the composition was planned. The general impression is that of a group whose upper boundary curves gently down from both ends to the centre. Four central figures with the broad, quiet surfaces either of the nude form or of a heavy, unyielding mantle (Daochus I) are framed in on either side by a group of two richly draped figures.² The exact centre of the group is marked by the upright spear and raised left arm of Agelaus. The impression of deliberately balanced composition given by the general outlines is strengthened by a study of the gestures in each case. All these were restored with an eye to indications present in the individual figures, regardless of any possible resulting symmetry in the group. In restoring the arms, the upper arm was actually present, or its position was definitely indicated by the muscles of the trunk in every case but that of Daochus II. In that case the left arm has been drawn raised and extended simply because no other pose seemed to offer sufficient explanation of the space between the cavity of this figure and that of Sisyphus I. With an upper arm at shoulder-height, probable variations in the pose of the forearm take place within limits such

¹ Apologies are offered for the roughness of a sketch prepared by archaeologists, not artists.

² It is true that for the exact pose and drapery of Daochus II we have no evidence. But the figure was certainly draped, and more probably not in the unusual sheath-like *chlamys* of Daochus I. The Athena wore an Ionic *chiton*, and over this would have had either a mantle or Doric *peplos*.

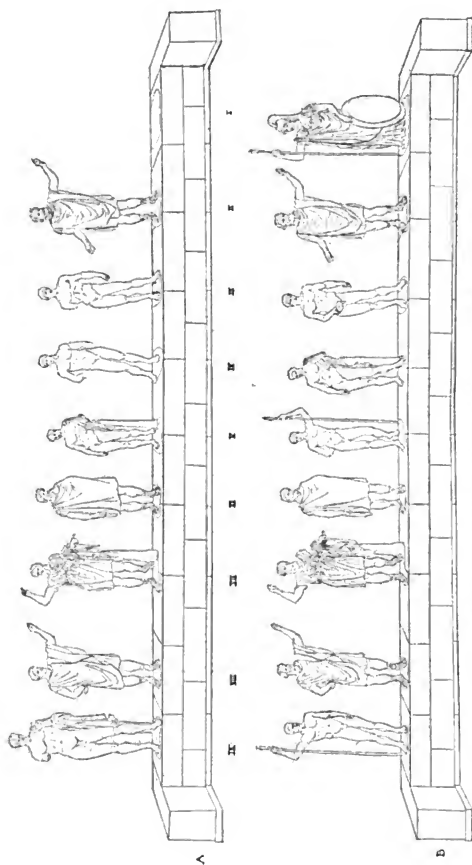


FIGURE 21. — THE OFFERING OF DAOCHUS AT DELPHI.

A. As described by Homolle. B. As described in the accompanying article.

that they could not seriously alter the main lines of the composition. Where the upper arm is not lifted, more essential differences of motive in the forearm may occur. The right upper arms of Aconius, Agias, Telemachus, and Agelaus were certainly not raised. The restoration of the forearms is, however, in at least three cases probable. In the case of Aconius, the arm is extended from the elbow to give the figure the balance needed to satisfy the eye. Had it hung at the side, the outstretched left would seem to pull the figure too far in that direction. For the Agias we have hesitated to offer a restoration. Yet of the possible poses and motives for the right hand, the one suggested — with the arm bent at the elbow and extended forward and toward the left, perhaps holding a phiale, as does the Idolino — seems the least unsatisfactory. With the Telemachus there can be little choice; the Agelaus has already been discussed.

The group resulting from these restorations of single figures surprises us by a balance of gesture as thoroughly carried out as if it had been the restorers' special purpose. The two outer groups with their commanding gestures correspond almost line for line. Of the central group, Agias and Daochus I have outer arms dropped quietly at the side, inner bent across the body; Telemachus and Agelaus have the outer arms bent. And yet over this framework of symmetry individual touches are so happily introduced that there is not a suggestion of heraldic stiffness. So far, then, as composition goes, these eight figures form a self-contained group without the Sisyphus II.

In spite of the exclusion of this figure on grounds of composition, it is well nigh certain that it was placed here at the time of the erection of the monument. If it was an addition, the original pedestal must have been one block shorter. The question then arises whether originally the precinct was narrower, with its rear wall turning sooner at the west end or was always of this width, leaving an ugly gap at the west end of the pedestal. This second alternative is so incredible that it need not be considered; but the other, that the wall formerly abutted on a shortened pedestal, must be disproved before we can say that the figure, which seems to stand outside the group, actually belonged to it from the beginning.

This proof we are able to offer, thanks to studies made in Delphi at our request by Mr. W. B. Dinsmoor, Carnegie Fellow in Architecture of the American School at Athens. The west end of the block of Daochus II has an *anathyrosis* which apparently is not a converted finished surface, for the marginal drafting has not been narrowed in the least, and the undercut drafting shows no sign of having returned, as it does on the present end blocks (PLATE XIV, A, *aa*). Further, the present short end stone in the middle course (PLATE XIV, A, *c*) — which might naturally be expected to have ended that course in the shorter pedestal — is too long to fit under the block of Daochus II. Again, the present end blocks in the top course have a raised lip (PLATE XIV, A, *bb*) next to the wall, which is not found on the block of Daochus II. It may, of course, have been planed off; but there is no trace of this. Finally, there is no possible relation between the joints in the wall behind and any shortened form of pedestal (see PLATE XIV, B).

This might be explained if the precinct-wall could be considered later than the pedestal. In reality, however, it can be shown to be earlier and to have been standing a number of years.¹ For its *euthynteria* is cut for a ground-level 0.07 m. lower than that of the pedestal (see PLATE XIV, A); and, what is just as conclusive, the orthostate blocks behind the pedestal, now completely hidden, have the same careful drafting as those in the side-walls which were always visible. This is discernible in Figure 2. It is not to be doubted, therefore, that the blocks now concealed were once completely exposed to view. At the points where the pedestal abuts on the side-walls this drafting has in each case been hewn down to form an *anathyrosis*. It is to this later insertion of the pedestal that the raised lips previously mentioned, on the upper surfaces of the end blocks, are due. They prevented chipping of the edges when the blocks were pried into place.

It seems clear, then, that the wall was erected first and that the group with its pedestal was set in at a later time and filled the entire space.²

¹ First suggested by Homolle, *B. C. H.*, XXIII (1899), p. 425. The contrary is supported by Keramopoulos, 'Ὁδὸς τοῦ Δελφῶν, p. 54.

² How long before this the wall had been built is not certain. The fact that

If, then, Sisyphus II belongs in the original group as here erected, but stands apart when the unity of the group is considered, how are we to reconcile the opposing facts? The explanation which we propose is this: that the Lysippean bronze in Pharsalus of which the Agias seems to be a copy was not an isolated figure, but a group; that this original group did end with Daochus II, the dedicator; but that when the copy was erected at Delphi, inside an enclosure too long to be filled by the original group, rather than leave space at one or both ends, another statue—of the dedicator's son—was added.

At all events, it seems clear that any study of this dedication as a group must consider only the eight figures ending with Daochus II. Analysis of the group of nine figures reveals no principle of artistic arrangement; the eight, on the contrary, show just that striving for rather obvious balance which is characteristic of the only other extended composition of the late fourth century known to the writers—the frieze of the choregic monument of Lysicrates. Nor must the breaking down of this careful arrangement through the addition of the Sisyphus II be imputed to indifference on the part of the later sculptors. A Thessalian prince's orders, like those of a modern prince, would have overridden any objections raised on aesthetic grounds.¹

this stands directly over the older precinct of Neoptolemus while the later precinct of that hero adjoins it to the east suggests that this was earlier than the later precinct and may have been itself the precinct of Neoptolemus for a time. Its clamps are in the older $\sim$ form, while the later Neoptolemus-precinct employs $\vdash$ clamps. By comparison with the votive offering of the Arcadians (dated 360 B.C.), which employs the same materials in its construction but the latest form of Greek clamp, this precinct must be dated early in the fourth century; and still earlier apparently is to be placed the date of the precinct in which our group stands. Later than either of these, as it would seem, because of its position in the angle between them, is a large poros block, serving as a pedestal but bearing the same contractor's signature ΠΑΓΚΡΑ as the lowest limestone blocks in the temple of Apollo. This might well date from about 360 B.C., and confirms the preceding argument for dating the Thessalian precinct early in the fourth century if not late in the fifth.

It has been thought that the Thessalian precinct must be later than the earthquake of 374 B.C., as a result of which the old temple of Apollo was pulled down and its sculptures buried in the front part of the old precinct of Neoptolemus, which projects far beyond the higher Thessalian precinct; but there is no evidence that the old precinct was not already buried by an earlier landslide.

¹ The reader is reminded of the embarrassingly dictatorial tone of Isabella d' Este toward Perugino, in her order for the Triumph of Chastity.

We propose, therefore, an original group of eight figures, arranged on a carefully composed plan, with the Agelaus assigned by Homolle moved to the position of Telemachus and in its place the new figure found in 1907. For the head of the line Athena is suggested, and a single fragment—that of a right shoulder—is attributed to her. It has been proved that Homolle was wrong in including his Sisyphus II in the group and in considering both end figures later additions, but correct in that Sisyphus II seems to have been an addition to the group as originally composed. For this figure a foot (see p. 466) is available, but there is no proof that it belonged to the group.¹

In restoring the group it has been necessary to depend on pure conjecture for the type of the Athena, the pose of Daochus II and Sisyphus II, the heads of all the draped figures, and the right arms of Agelaus and Telemachus. In all other cases, as has been explained above, the restorations follow indications given by the preserved portions. The conjectured parts, however, are not such that they could have altered materially the main outlines of the group.

Such dedicatory groups, great aggregations of single free-standing figures, have always been familiar to students of Greek sculpture through tantalizing literary allusions; but to form any idea of their actual appearance we have had to reason forward from existing single figures or backward from architectural sculptures. We venture to hope that the present restoration may offer, in a form fairly approximate, an example of a type of Greek sculptural composition hitherto only vaguely understood.

ELIZABETH M. GARDINER,
KENDALL K. SMITH.

¹ In this paper no attempt has been made to distinguish and discuss the varied styles of sculpture exhibited by the group. It seems certain that at least two sculptors were employed, one very possibly a Thessalian who executed the draped figures, and another a Sicilian (?) acquainted with the repertoire of Attic types, who did the nude figures. A study of these various styles would certainly prove fruitful.

THE PLAN OF THE PRECINCT

THE plan of the precinct is restored as shown on PLATE XIV on the basis of the following facts.

The southern portions of both side-walls are no longer in place and their extent in this direction cannot be definitely determined (cf. Fig. 2). The west wall, however, still contains four orthostates, of which the outermost has no cramp-cutting, and therefore cannot have adjoined an angle-block; one or more regular orthostates must have intervened. The peculiar location of the large poros base (see p. 473, note 2) suggests that the precinct reached forward to that point. It would thus have exactly the depth, as it now has just the width, of the second precinct of Neoptolemus, which was built beside it. This allows nine blocks of the usual length, 0.90 m., in each of the side-walls.

Of the east wall only the rear angle-block is *in situ*. But there are lying near by the orthostate which stood next to this angle and formed a joint with the end of the pedestal; the front angle-block, which has a cramp-cutting on the side as well as at the end, indicating that the front of the precinct was at least partially closed; two blocks shown by their cramp-cuttings to have been joined to the corner-block; and an orthostate ending in an anta, which evidently belongs to the opening in the front wall. This anta-block, since it had no cramp-cutting, did not stand next to the corner. In the restoration only one block has been inserted between it and the angle in order to leave the front as open as possible, on the analogy of other exedrae. This gives still enough wall-space so that the poros base would not block the opening.

The plan of the precinct, therefore, is restored as shown in the diagram.

WILLIAM BELL DINSMOOR.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

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GENERAL AND MISCELLANEOUS

Glaser's Explorations in South Arabia. — In *Alt. Or.* X, 1909, 2, pp. 1-32 (pl.), O. WEBER gives an account of the life and the travels of the late Eduard Glaser, in continuation of his account of the explorations in South Arabia, given *ibid.* VIII, 4.

The Base of the Obelisk of Theodosius. — An architectural and archaeological study of the base of the Egyptian obelisk in the Hippodrome at Constantinople shows that both the square sculptured pedestal immediately beneath the bronze legs and the marble block bearing the inscription on which this pedestal rests are older than the date of the erection of the obelisk in the reign of Theodosius. The scenes on the pedestal probably represent Constantine the Great with his three sons, at a time when they were all three Caesars, perhaps in 333 A.D. It is possible that Constantine brought the obelisk to his new capital to match the one set up by Augustus in the Circus Maximus at Rome, but why it was not erected until the year 390 is not altogether clear. (A. J. B. WACE and R. TRAQUAIR, *J.H.S.* XXIX, 1909, pp. 60-69; 3 figs.)

The Cypriote Calendar. — In *Arch. Rel.* XII, 1909, pp. 335-337, A. VON DOMASZEWSKI shows that between 21 and 12 B.C. the Cypriotes adopted a calendar in which the year began in May and the months were named: *Aphrodisios, Anchisaios, Romaioi, Aineadaioi, Kapetolios, Sebastos, Agrippaios, Libaios, Oktabios, Iulaios, Neronaios, Drusaioi*. In 2 B.C. the names were changed to *Aphrodisios, Apogonikos, Aineios, Iulos, Kaisarios, Sebastos, Auto-*

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor BATES, Editor-in-charge, assisted by Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Mr. L. D. CASKEY, Miss EDITH H. HALL, Mr. HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor FRANK G. MOORE, Professor CHARLES R. MOREY, Miss M. L. NICHOLS, Professor LEWIS B. PATON, Professor A. S. PEASE, Professor S. B. PLATNER, Professor JOHN C. ROLFE, Dr. N. P. VLACHOS, and the Editors, especially Professor MARQUAND.

No attempt is made to include in this number of the JOURNAL material published after July 1, 1909.

For an explanation of the abbreviations, see pp. 123, 124.

kratorikos, Demarchezusios, Plethypatos, Archiereus, Hestios, Romaïos. Aphrodisias began September 23.

Greek Influence on Chinese Art.—In *Z. Ethn.* XLI, 1909, pp. 1-21, ADOLF FISCHER calls attention to influences on Oriental art that must have come from Greece. A wooden statue of the goddess of Mercy and two female statues made of dried lacquer show soft round lines in the clinging drapery and graceful forms that recall Greek handiwork very vividly. Bronze statues also show this Greek-Indian influence as, e.g., that of Kwanyin at Tatsingör, near Peking. A series of Chinese grave-reliefs which Fischer reproduces show startling similarity to chariot processions in old Assyrian or Babylonian sculptures.

Western Influence on Chinese Vase Decoration.—In *Z. Ethn.* XL, 1908, pp. 932-939, OTTO JAEKEL points to striking resemblances between the decoration of the earliest earthenware vases of China and that of the bronze vessels of the Aegean and western Asia. The dragon, the mountain lion, waves, clouds, the shapes of mountains and trees, have real parallels in the art of the West. The horizontal position of legs, indicating rapid movement, is particularly striking in both. He thinks these forms were all derived from stylistic representations of waves and that they were introduced from the West (so Münsterberg's *Kunstgeschichte*, III, p. 281), not as A. Reichel thought (*Memnon*, 1907, p. 54) from East to West. He points to certain old Persian vases which may have been archetypes of the ancient Chinese vases from which his own are derived. A bronze lion found in Tsinaufes, used probably as a base for a statuette, shows a striking resemblance to Babylonian lions similarly used. The paper is followed by a discussion of several pages.

Contributions to Scandinavian Archaeology.—The second volume of the *Fornedönnen* of the K. Vitterhets Historie och Antikvitets Akademien (Stockholm, 1908, Wahlström och Widstrand, 385 pp.) contains several contributions to Scandinavian archaeology. O. ALMGREN describes four graves of the Viking period at Sagån, pp. 1-19 (22 figs.); E. BRATE discusses the Runic inscriptions on the Isle of Man, pp. 20-34, 77-95 (2 figs.); J. AHRENBERG discusses the Sigtuna doors at Novgorod, pp. 35-43 (2 figs.); E. EKHOF describes a carved bench in the Kungsåra church in Vestmanland, pp. 49-76 (12 figs.); O. ALMGREN discusses northern stone-age carvings, pp. 113-125 (30 figs.); O. RYDBECK gives an account of a cemetery of the early Iron Age at Skane, pp. 125-138 (12 figs.); T. J. ARNE describes a grave of the Stone Age in the parish of Söndrum, Halland, pp. 139-144 (8 figs.); G. HALLSTRÖM writes on north Scandinavian rock carvings, pp. 160-189 (15 figs.); E. EKHOF discusses the roof of the round church at Bromma, near Stockholm, pp. 189-201 (8 figs.); ROSA NORSTRÖM records the discovery of Roman coins at Sigdes, Gotland. Objects of the Bronze Age from St. Dalby, Öland, are also published, pp. 205-208 (10 figs.); as well as a full account of the acquisitions of the National Historical Museum at Stockholm for the year 1907, pp. 209-319 (214 figs.).

EGYPT

Chronology in Early History.—In *Z. Ethn.* XLI, 1909, pp. 283-295, EDUARD MEYER gives a summary of the first volume of the new edition of his *Geschichte des Altertums*, under the title 'Alte Geschichte und Prähistorie.'

See also: The Egyptian Chronology of the Late Period, by J. H. Breasted, in the same volume.

Egyptian chronology, he says, now fixes the twelfth dynasty on astronomical grounds between 2000 and 1785 B.C., bringing the time of the pyramid builders into the first half of the third millennium and King Menes to about 3300 B.C. The Egyptian calendar of Heliopolis and Memphis began with the 19th of July, 4241 B.C. The oldest Trojan city Meyer places about 3000 B.C., but insists that there were no Indo-Germanic peoples in Asia Minor until late in the second millennium. He discusses at some length Cretan chronology and ethnology and closes his paper with an argument in favor of regarding the home of the Indo-Germanic race, in accord with older ideas, as in Central Asia, basing this on the newly discovered language of the Tochars, which is, strange to say, a "centum-language."

Was Khasekhumui called Mena?—In *S. Bibl. Arch.* XXXI, 1909, pp. 128-132 (2 pls.), F. LEGGE shows that it is very improbable that Mena was the *nebti* or the *suten bat* name of King Khasekhumui of the first dynasty of Egypt.

The Length of the Reign of Amenhotep II.—In *S. Bibl. Arch.* XXXI, 1909, pp. 42-43, F. L. GRIFFITH discusses the importance of the cartouche of Amenhotep II on one side of a wine-jar, which has on the other side a date of year 26, in determining the length of the reign of Amenhotep II, reaching the conclusion that it has little weight; furthermore that there is no clear evidence for believing that his reign continued longer than between three and seven complete years, and that it was probably but four to five years long.

Egyptian-Mycenaean Ornamental Vases.—The flowers, ducks' heads, and other objects which are seen above the rim of show vases in Egyptian paintings, have been explained by L. Borchardt as representing the decoration on the inside of the vase, and by H. Schäfer as objects standing on the rim, but they are rather to be interpreted as actually inside the vase. In the oldest times, natural flowers were so used; later, wooden ones faced with gold; and the gold flower and leaf disks found in Mycenaean graves are remains of such. Figures of birds, animals, and other objects belonging to a landscape were also introduced, and in course of time filled the vessel entirely and overflowed upon the table top. How far such figures within a vase developed into figures as handles and as ornaments on the outside, and whether the origin of painted decoration of vases is to be traced to plastic objects within, are doubtful questions. The raised "emblems" in gold and silver dishes of Hellenistic and Roman times are probably due to a Ptolemaic revival of the very ancient Egyptian custom of treating a vessel as a miniature lake or landscape. (A. JOLLES, *Jb. Arch.* I. XXIII, 1908, pp. 209-250; 50 figs.)

The Egyptian Method of Working Hard Stones.—In *S. Bibl. Arch.* XXXI, 1909, pp. 172-184 (3 pls.), A. F. R. PLATT discusses the methods of quarrying and dressing stone employed by the ancient Egyptians. Holes were drilled in the rock with tubular drills tipped with corundum, which were in use in Egypt from an early date. The vases of granite, basalt, diorite, etc., that are found in the earliest tombs were chipped and polished outside without rotary motion, and were hollowed out by grinding with stone blocks fed with sand or emery. Blocks were split off in the quarry, probably by the expansion of wooden wedges that were driven into the drill-holes dry and were subsequently saturated with water; but it is pos-

sible that the Egyptians understood also what is known as the feather and block wedge used by modern quarrymen. One inscription states that it took seven months to quarry two flawless blocks to be used as obelisks. Stone sarcophagi were excavated by drilling holes with corundum-tipped drills and then breaking through the spaces between the holes. In later times there were saws of bronze or hardened copper with corundum teeth set in the edges. Chisels also were used. All that have been found are made of hardened copper.

The Antiquity of the Hoe in Egypt and in Asia. — In *Or. Lit.* XII, 1909, col. 107, W. M. MÜLLER shows that the Egyptian word *marru*, which is represented by the picture of a primitive hoe or mattock, is a word of Semitic origin that is found also in Babylonian. This indicates that Syrian cultivation of the soil with this instrument was at least as old as this sort of cultivation in Egypt.

Egyptian Method of Iron-working in Africa. — In *Z. Ethn.* XLI, 1909, pp. 22-53, F. VON LUSCHAN describes iron-working in Africa. The first part of the article describes various forms of bellows, one of which is strangely like that in use in ancient Egypt. Two shallow vessels are covered with a loose matting of reeds, which is pulled up and forced down in alternation, driving the air through pipes into the heart of the fire. The ancient prototype dates back to the reigns of Thuthmes III and Amenhotep II (1471-1448 B.C.).

Monuments of Ancient Ethiopia. — Emphasizing the importance of the University of Chicago Expedition in Nubia which made the first complete collection of the inscribed monuments of Ethiopia, J. H. BREASTED, in *Bibl. World*, XXXII, 1908, pp. 376-385, reviews the problems connected with the history and language of Ethiopia and gives a clear statement of the important results of the discovery by Dr. Karl Schmidt in Cairo in 1906 of fragments of parchment written with Greek letters in a language neither Greek nor Coptic, but which proved to be ancient Nubian. Since the Greek and Coptic originals of some of these fragments are known, the discovery will lead to the decipherment of the ancient Nubian language.

The Claim of Divinity on the Part of the Pharaohs. — In *Or. Lit.* XII, 1909, cols. 1-5, W. M. MÜLLER seeks to show that the throne-name of the kings of Egypt is not to be translated as a doxology, containing an ascription of praise to the divinity, but is really a claim of divinity on the part of the king himself. This can be traced back into the early Egyptian dynasties, and is evidence that the claim to be an incarnation of the god Ammon-Re does not begin in the time of the New Empire.

A Serpent Altar in Cairo. — In *Arch. Rel.* XII, 1909, pp. 221-223 (pl.; fig.), S. WIDE publishes a marble altar in Cairo 21.5 cm. high, adorned in front with a rosette and on either side with a serpent climbing up to a dish which rests on top of the altar and held the offerings. The serpent symbolizes the dead man and is represented twice for the sake of symmetry. On pre-Mycenaean graves a vessel was placed for the offerings for the dead; and on geometric vases intended for sepulchral purposes the serpent often appears.

The Dodgson Papyrus. — In *S. Bibl. Arch.* XXXI, 1909, pp. 100-109 (2 pls.), F. L. GRIFFITH gives a translation of the Dodgson papyrus, and shows that there is nothing in the document to connect it with Christianity.

It is not, as was formerly claimed, a series of curses upon one who had adopted Christianity, but it contains messages of reproach and warning sent from the oracle of Khnum, Sopti, and Anuki, the deities of Elephantine, to two persons of wealth and position who had neglected the sacred mysteries of Osiris.

Steatite Libation Cups.—In *Proc. Soc. Ant.* XXII, 1908, pp. 89-102 (12 figs.), Sir JOHN EVANS discusses a series of steatite libation bowls found in Egypt, and concludes that they probably date from the revival of the worship of Serapis and other Egyptian deities, under Julian the Apostate, about 360 A.D.

The Γῆς Πέπλος of Hecataeus.—The genuineness of the supposed fragments of the Γῆς πέπλος of Hecataeus, which was argued on the negative side by Cobet (*Mnemosyne*, 1883) and in the affirmative by Diehl (*Hermes*, 1887), is discussed again by J. WELLS in *J.H.S.* XXIX, 1909, pp. 41-52. He believes that the lack of any reference to the book in the fourth century, especially by Aristotle, and the positive opinion of Callimachus that the fragments were forged, together with other external and internal evidence, are decisive proof of a third-century Egyptian forgery, greatly outweighing the verdict of Eratosthenes on the other side.

Two Greek School Tablets.—The British Museum owns two of the most perfect of the wooden school books of Graeco-Roman Egypt. One is a single slab, 16 1/2" x 5 1/4", the other a bunch of eight, originally nine, numbered tablets, somewhat smaller than the first. They contain grammatical exercises for teaching the use of the cases, the government of verbs, the conjugation of *παῖω* (with *ο* written for *ω*), the phonetic values of the letters of the alphabet, etc., and evidently show the usual method of teaching such things in the third century A.D. They are published, with facsimiles and with notes on four other wooden books in the British Museum, by F. G. KENYON, *J.H.S.* XXIX, 1909, pp. 29-40 (2 pls.).

Leadén Token-coinage of Egypt under the Romans.—J. G. MILNE supplements a chapter contributed by him to *Fayûm Towns and their Papyri*, by a further discussion of the lead coins found in that region, and elsewhere in Egypt. He still holds that these coins were a local token-currency for low values, current in the latter part of the second and in the third century A.D., when the Alexandrian mint issued hardly any coins of less value than tetradrachms. (*Num. Chron.* 1908, pp. 287-310; pl.)

BABYLONIA, ASSYRIA, AND PERSIA

Documents of the First Dynasty of Babylon.—In the *Cuneiform Texts of the Babylonian Expedition of the University of Pennsylvania*, Vol. VI, Pt. 2 (1909), pp. xvi, 164 (70 pls.), A. POEBEL publishes in photograph, transcription, transliteration, and translation 138 tablets containing legal and business documents from the time of the first dynasty of Babylon, chiefly from Nippur. These documents embrace purchases, redemptions, exchanges, partitions of estates, adoption-contracts, marriage-contracts, manumissions, loans, contracts of hire, leases, receipts, memorandums, and attestations made before a court. Of particular importance is the list of date-formulas covering the years from Hammurabi to Samsu-ditana. This is followed by a discussion of the Babylonian system of naming years

after events, and an outline of the political history of Babylon from the seventeenth year of Sin-muballiṭ to the end of the first dynasty. The volume is provided with copious indices and tables describing the character and contents of the tablets. The photographic reproductions are so admirable that it is possible from them to read the inscriptions without difficulty.

Babylonian Chronicle of the First Dynasty. — In *S. Bibl. Arch.* XXXI, 1909, pp. 14-19, C. H. W. JOHNS discusses a number of the years, the Babylonian names of which have not yet been determined with certainty, and endeavors to identify these with particular years of one or other of the kings of the first dynasty.

Ancient Babylonian Personal Names. — In *Z. Assyr.* XXII, 1909, pp. 284-316, P. DHORME gives an alphabetical list in transliteration and translation of the early Babylonian personal names in the documents from Lagash that have been published in the first and second series of tablets edited by Thureau-Dangin, and in the historical tablets which have been published in various reviews. All belong to the pre-Sargonic period. They throw an interesting light upon the theology and upon the civilization of that early age.

Sargon, the Father of Naram-Sin. — In *Or. Lit.* XII, 1909, cols. 53-54, P. DHORME discusses anew the troublesome question of the relation of Sargon, the father of Naram-Sin, to Sharru-GI (see *A.J.A.* XIII, pp. 192-193). He comes to the conclusion that Sharru-GI is to be read Sharru-gani, and that this name has been confused by later scribes with Shargani-sharri, the father of Naram-Sin. See also Halévy in *R. Scm.* XVII, 1909, pp. 110-114.

The Genealogy of the Kassite King Agum. — In *Or. Lit.* XII, 1909, cols. 108-110, F. HOMMEL claims that the inscription of King Agum II, published in *V, R.* 33, agrees with the List of Kings; and that the first three kings of the Kassite dynasty are Gaudi, Agum, and Kastilias.

The Patesis of Tupliash. — In *Or. Lit.* XII, 1909, cols. 161-162, A. UNGNAD discusses a number of documents which prove the existence of an ancient state named Tupliash, whose rulers bore the title of Patesi.

The Law Book of Hammurabi. — In *Z. Morgent.* LXII, 1908, pp. 385-393, M. SCHORR and D. H. MÜLLER discuss the difficult sections 280-282 of the Law Code of Hammurabi. Both agree that the words, "when a man buys a slave in a foreign land," refer to the purchase of a Babylonian slave, who in some way has come into the possession of a foreign owner. In this case there are three possibilities: first, the master has sold the slave to a foreigner; second, he has been stolen and carried to the foreign land; third, the slave has run away from Babylonia. Schorr holds that these laws contemplate entirely various aspects of the second possibility. Müller holds that the three laws contemplate all three possibilities.

Erba-Adad and Karaindash. — In *Or. Lit.* XII, 1909, cols. 54-58, P. SCHNABEL brings evidence to show that Erba-Adad was a contemporary of Karaindash, and by defeating him won the right to bear the title of king of the four quarters of the world. Erba-Adad must be at least the third king of Assyria after Ashurrimnishesu and, therefore, cannot well be a contemporary of Karaindash I, but must be the contemporary of Karaindash II.

The Name Sennacherib. — In *Z. Morgent. Ges.* LXII, pp. 721-724, A. UNGNAD maintains that the name of the Assyrian king should not be read Sin-ahê-erba, but Sin-ahhê-riba, which means "May Sin give brothers for a

reward" (that is, for the piety of the father). This pronunciation is nearer to the Hebrew pronunciation Sennacherib.

New Babylonian and Achaemenian Chronology.—In *Z. Morgenl. Ges.* LXII, 1908, pp. 629-647, F. H. WEISSBACH gathers up the new material that has lately been afforded for the determination of the dates of the Babylonian and Achaemenian kings. Through the publication of Clay's *Legal and Commercial Transactions* and Ungnad's *Monuments of the Royal Museum of Berlin* more than one thousand new documents have been made accessible, that make possible the determination of a number of historical datings. The problem of the chronology of the Behistun inscription has entered upon a new stage since King and Thompson published their revised and enlarged text of it. All these new facts are investigated, with the result that the dates of all the more important events in the reigns of the Persian kings from Artaxerxes II to Darius III are chronologically established.

Babylonian Omens from Animals.—In *Mitt. Vorderas. Ges.* XIV, 1909, pp. 127-304, J. HUNGER gives an elaborate discussion of the omens derived from living animals and from sacrificial victims, together with the Graeco-Roman parallels. After a preliminary discussion of the theory of omens in antiquity, he takes up the various kinds of omens derived from birds, *e.g.* the falcon, "cave bird," raven, eagle, dove, swallow, cock, etc. He then takes up the omens from animals, *e.g.* the horse, ass, ox, sheep, goat, gazelle, pig, dog, fox, etc. The elaborate systematic treatment of omens that is found in Babylon has few parallels among the Greeks and Romans; but, on the other hand, the effort to create favorable omens and to remove the effect of bad ones by expiatory sacrifices, such as is found especially among the Romans, has no analogy in Babylon. In all probability the Graeco-Roman system of divination is to be traced back ultimately to a Babylonian source.

Forecasting the Future among the Babylonians and Assyrians.—In *Alt. Or.* X, 1909, 3, pp. 1-36, A. UNGNAD discusses the methods of divining the future that were used in ancient Babylonia. Among these were the examination of the liver of sacrificial victims, the use of the lot, bowl-divination with oil or with water, divination with fire, astrology, the observation of atmospheric phenomena, dreams, and portents from the motions of birds and animals. He gives also a discussion of the so-called handbooks of divination, and of the process of sacrifice for purposes of divination, and of the practice of oracle-giving.

The Goddess Ištar in Assyro-Babylonian Literature.—In *S. Bibl. Arch.* XXXI, 1909, pp. 20-37 (2 pls.), 57-69 (pl.), T. G. PINCHES discusses the origin and history of the name of Ištar, identifies her with the Sumero-Akkadian Innana, whose worship has been traced back to 4000 B.C.; he also discusses certain aspects of Ištar as she appears in the legend of the descent of the goddess into the underworld to seek her husband, Tammuz; Ištar as the great nature-goddess; Ištar as the goddess of war; the Gilgames legend and the "Ištar Psalm"; and, finally, the aspect of the goddess as revealed in certain prayers and invocations to her and Tammuz.

A Hymn to Bel.—In *J.A.O.S.* XXIX, 1908, pp. 184-191, F. A. VANDERBURG gives a translation of a difficult hymn to Bel, published in *Cuneiform Texts*, XVI, Plates 11 and 12.

New Representations of Resheph. — In *Or. Lit.* XI, 1908, cols. 529-531 (4 figs.). W. SPIEGELBERG describes four hitherto unpublished representations of the Semitic god Resheph that have recently been found in Egypt. All show the familiar type of the armed warrior in profile, with tall, pointed cap, spear, and shield.

The Sumerian Question. — In *R. Sémi.* XVII, 1909, pp. 107-109, 168-222, a series of letters is published by VIROLLEAUD, BEZOLD, and HALÉVY on the question whether the so-called Sumerian is to be regarded as a real language or only as an artificial invention of the Babylonian priests.

The Historical Value of the So-called Vulture-stele. — In *Memnon*, II, 1909, pp. 155-179 (2 pls.; fig.), MARIE PANCRITICUS discusses the historical inferences that may be drawn from the famous vulture-stele of Eannatum, king of Lagash about 3000 B.C. The largest fragment of the monument does not represent a line of marching soldiers, but a phalanx formed in V-shape, with interlocking shields and spears projecting between the shields. The existence of such a military formation implies a high degree of organization in the army of ancient Lagash, and allows some interesting inferences in regard to the development of military and political institutions in that country. The disparity between the rude art and the elaborate military organization demands the assumption of the recent entrance of a new and warlike race into an ancient seat of civilization. That is, it reflects the beginning of the conquest of Babylonia by the Semites.

The Consecration of Slaves to the Gods. — In *Or. Lit.* XII, 1909, col. 110 f., H. DE GENOUILLAC publishes a Babylonian tablet which contains a dedication of slaves in the same terms in which animals are devoted for sacrifice, which seems to indicate that these were designed as victims for human sacrifice.

Thumb-prints in Babylonia. — In *S. Bibl. Arch.* XXXI, 1909, p. 88 (pl.), C. H. W. JOHNS publishes fragments of a Babylonian tablet which seems to be a deliberate attempt to draw on an enlarged scale the marks left by a thumb on clay. This suggests curious questions as to whether thumb-prints were used in ancient Babylonia for purposes of identification, as by modern police-officers.

The Use of Pork in Ancient Babylonia. — In *Or. Lit.* XI, 1908, cols. 533-537, A. UNGNAD shows that pork was highly valued as food in the time of Hammurabi, and was offered as part of the sacrifices of the temples. There is a case on record of the severe punishment of the theft of a pig from the court of a temple, and lists of temple-provisions contain mention of various parts of swine.

The U, the Qa, and the Mina in Babylon. — In *J. Asiat.* XIII, 1909, pp. 79-112, F. THUREAU-DANGIN discusses the values of the ancient Babylonian weights and measures, reaching the conclusion that the U, or linear unit, had a length of 495 millimeters; the Qa, the unit of capacity, contained 404 millilitres; and the Mina, the unit of weight, contained 505 grammes.

The Babylonian Origin of the Greek Obolos. — In *J.A.O.S.* XXIX, 1908, pp. 204-209, J. A. MONTGOMERY publishes an Aramaic ostrakon from Nippur in which the word *mōbal* occurs. This seems to be the coin indicated by the abbreviation *m* in a number of Aramaic texts, and seems also to be the origin of the Greek word *obolos*, a small Attic coin, in value

one-sixth of a drachma. In consideration of the digamma-like pronunciation of the Babylonian *m*, this etymology is perfectly natural. No Greek etymology for the word has yet been discovered.

The Old Babylonian Letter addressed to Lushtamar. — In *J.A.O.S.*, XXIX, 1908, pp. 220-223, G. A. BARTON argues that the much discussed Lushtamar tablet, which is claimed to have come from the temple library of Nippur, was really written in Sippar, and cannot have been found at Nippur. The name of the sender of the letter was Ilushubani, son of Ibinishakh. From a recently published tablet it is known that he was a resident of Sippar and not of Nippur. This letter was not sent to Lushtamar, but was a duplicate that was retained by its author for his private file in Sippar. This is the reason why the clay envelope has not been broken.

Babylonian Seals. — In *Ber. Kunsts.* XXX, 1909, cols. 127-134 (9 figs.), L. MESSERSCHMIDT publishes five Babylonian seal cylinders in Berlin dating from the middle of the third millennium B.C. A piece of sculpture in relief of similar date and a round Hittite seal are also published.

The Bison and the Chaldaean Celestial Bull. — In *R. Arch.* XIII, 1909, pp. 250-254 (6 figs.), H. BREUIL explains the apparently man-headed bull on Babylonian seals as a rude naturalistic representation of the bison, the animal's beard making the face look human. Later the representation was misunderstood, and bulls were represented with human heads. Quaternary drawings of bisons, from Niaux, Font-de-Gaumes, and Altamira, exhibit resemblances to human features no less striking than those seen on Babylonian seals.

SYRIA AND PALESTINE

Excavations of the Palestine Exploration Fund. — The third part of an extensive review of the report of the *Pal. Ex. Fund.*, issued in 1902, deals with four minor sites, rather superficially excavated, in the border-land between southwestern Judaea and Philistia. Although not traced to so early periods as Megiddo and Lachis (see *A.J.A.* 1908, pp. 87, 356), these settlements go back to the second millennium B.C., and come down through Canaanite and early and late Jewish periods to Hellenistic, Maccabaeae, Roman, and in some cases to Byzantine and Saracen occupation. The Philistine remains, especially those from Gath, the city of Goliath, seem to bear out the theory that this people was of Mycenaean or Minoan stock. Tell Zakariya, ancient Azeka, may even derive its present name ultimately from the same source as Zakro in Crete. In the soft stone of all these hills there are numerous artificial caverns, used originally as cisterns, cellars, stables, and places of refuge, and only occasionally and in late times for burial. At Tell Sandahanna, ancient Marissa, Jewish Maresha, the home of Micah and Eliezer and chief city of Idumaea, one or two painted tombs that have escaped violation belong to a period of a transition from Greek (Ptolemaic) to Idumaeae names. A collection of lead puppets with hands and feet bound, which were found with denunciatory inscriptions in the debris of a sanctuary, shows how the superstition of the lower classes sought protection from enemies. (H. THIERSCH, *Arch. Anz.* 1908, cols. 344-413; 19 figs.)

The Stele of Zakir. — In *B. Soc. Ant. Fr.* 1908, pp. 223-224, C. BRUSTON discusses the stele of Zakir, king of Hamath about 800 B.C., recently pub-

lished by Pognon (*Inscriptions sémitiques de la Syrie, de la Mésopotamie et de la région de Mossoul*). The writing is similar to that of the famous Moabite stone. The word Elôr he takes to be another name or title of Baal-Shamain, signifying the god of light. Zakir records that he erected this stone because Baal-Shamain had made him king and then saved him from the attack of seventeen kings whom Hazaël, king of Aram, had united against him. The capital of Hamath was Hazrak, probably the same name as Hadrak in Zachariah (ix, 1), though there it is the name of a king probably taken from the town. Zakir was king of Hamath and Lahash or Lahish, which is perhaps the same as the Biblical Laish. The inscription is also discussed by J. BARTH in *Or. Lit.* XII, 1909, cols. 10-12; by J. A. MONTGOMERY in *Bibl. World*, XXXIII, 1909, pp. 79-84 (pl.); and by E. MEYER in *Arch. Anz.* 1908, cols. 510-511.

Notes on a Few Inscriptions.—In *J.A.O.S.* XXIX, 1908, pp. 192-202, C. C. TORREY shows that the expressions, "Sidon by the sea," "High heavens," and "the Resheph district" in the Phoenician inscriptions refer to three main districts of ancient Sidon. "Sidon on the Sea" was the cape, "High heavens" was the northern district of the territory on the mainland, and "the Resheph land" was the region to the south. He shows that an ornamental device found on Hebrew seals is really an adaptation of two Egyptian *ankhs*, or symbols of life. He publishes also a new copy of the high-place inscription in Petra containing a dedication to the goddess al-'Uzzā. In the light of this new text the inscription is to be translated, "These are the steles of al-'Uzzā and Mārē Baitā made by Wabbullāhi the caravan-master (?)."

Mention of Astrology in Phoenician Inscriptions.—In *Or. Lit.*, XII, 1909, col. 207, H. GRIMME seeks to show that the consonants *'lm* cannot always be read *ēlim* 'gods,' but are sometimes singular and denote 'an astrologer.' The name appears as *elym* in Greek writers, and in Acts xiii, 8, as Elymas the magician.

A Funerary Inscription from Hegra.—In *R. Scm.* XVII, 1909, pp. 66-69, J. HALÉVY publishes a translation and commentary on an inscription recently discovered at Hegra and published a few months ago by M. Chabot in the *C. R. Acad. Inscr.*

The Scribblings at Sinai.—In *S. Bibl. Arch.* XXXI, 1909, pp. 38-41, E. J. PILCHER reaches the conclusion that certain *graffiti* on some of the Egyptian objects brought by W. M. Flinders Petrie from the Peninsula of Sinai and exhibited at University College, London, in 1905, have no intelligible meaning but were made as the pastime of some illiterate person.

A Bilingual Weight from Palestine.—In *R. Arch.* XII, 1908, pp. 353-358 (2 figs.), RENÉ DUSSAUD publishes and discusses a terra-cotta weight recently acquired at the sale of Professor Naue's collection at Munich. The weight had the form of a lion on whose side is a bilingual (Assyrian and Aramaic) inscription "Palace of . . . king of Aššur. 1 Mina of the king," and on the bottom, in Phoenician characters, "Mina of the king." The object weighs 81 grammes. A similar weight, published by Father Vincent, is in the Ustinow collection at Jaffa. These inscribed weights indicate that in the eighth century B.C. weights certified as conforming to the system of the Assyrian royal mina were in use in Palestine. The Assyrian measures were

probably also employed, and the inscription *le-melek* or *lam-melek* on amphora handles may be rendered: "of the king (of Assyria)."

Dolmens, Menhirs, and Cupmarks in Palestine. — In *Z. Alttest. Wiss.* XXIX, 1909, pp. 113-128, H. GRESSMANN, in opposition to Spoer in *Z. Alttest. Wiss.* 1908, pp. 271 ff. (*A.J.A.* XIII, p. 197), maintains that the dolmens of Palestine are never altars, but are always graves, and that the cupmarks are exclusively designed to contain water for the dead. The menhirs are never phallic emblems, but are memorial stones either of events in the life of the nation, or of distinguished individuals, or are boundary stones.

Some Problems of Herod's Temple. — In *Exp. Times*, XX, 1909, pp. 181-183, 270-273, A. R. S. KENNEDY continues his discussion of some of the problems of Herod's Temple in previous numbers of the same journal. He deals with the position of the temple-courts, the identification of the 'Beautiful Gate' and the position of the temple itself within the inner court.

The So-called Agricultural Calendar from Gezer. — In *R. Bibl.* XVI, 1909, pp. 213-269, H. VINCENT discusses the tablet recently found at Gezer which contains a sort of ancient Israelitish farmer's calendar. The same monument is discussed by J. HALÉVY in *R. Scm.* XVII, 1909, pp. 151-153.

Bible Lands in the Time of the Tell el-Amarna Letters. — In *R. Bibl.* XVI, 1909, pp. 50-73, P. DHORME continues the discussion of the history of Canaan in the times of the kings Amenophis III and Amenophis IV that was begun in a previous number of the same review.

The Religious Antiquities in Palestine. — In *Memnon*, II, 1909, pp. 211-226 (6 figs.), E. SELLIN replies to the contention of H. Thiersch in *Jb. Arch. I.* 1907, cols. 275-358, that none of the remains found thus far in Palestine have any religious significance. He brings evidence to show that the standing stones in Gezer, Taanach, and Megiddo are really the same as the sacred pillars of the Old Testament, that the carved stones are actually altars, that the cave under the castle of Ishtarwashur was used as a sanctuary, and that the jars containing infants were not simply cases of burial, but were actual sacrifices.

Some Problems suggested by the Recent Discoveries of Aramaic Papyri at Syene. — In *Exp. Times*, XX, 1909, pp. 200-205, is published a paper read before the Third International Congress for the History of Religions held at Oxford in September, 1908, in which OWEN C. WHITEHOUSE presents some of the problems suggested by the Aramaic papyri recently discovered at Syene which throw some light on the period of Jewish life between 470 and 407 B.C. and also on certain obscure passages in Malachi, the 'Trito-Isaiah,' Joel, Ezra, and Nehemiah. The author considers especially in their bearing upon these problems, the three papyri edited by Sachau, which are copies of a letter addressed from the Jewish settlement at the stronghold Yeb to the viceroy of Judah in the seventeenth year of Darius Nothus, 407 B.C.

Yahû or Yahw? — In *Exp. Times*, XX, 1909, pp. 231-232, H. F. B. COMPTON discusses the vocalization of the name YHW which occurs in the recently discovered Aramaic papyri relating to the Jewish colony in Egypt, which the editors invariably vocalize as Yahû or Jahû. The author raises the question as to the connection between Yahweh and Yahû and suggests that YHW is an abbreviation of YHWH and as such should be

vocalized as Yahw, or Yahv, which would be an intermediate form between Yahweh and Yah.

A Supposed Figure of Yahweh. — In *R. Bibl.* XVI, 1909, pp. 121-127, H. VINCENT discusses the supposed image of Yahweh published by G. Dalman in the *Palästina-Jahrbuch*, II, 1906, pp. 44-49, and denies that there is any reason to suppose that this image was intended to represent Yahweh.

The Name Jahwe. — In *Or. Lit.* XII, 1909, cols. 211-213, P. HAUFF holds that Jahwe was at first the god of the Edomites, and that his original name was Esau, 'maker.' Jahwe, which means 'He who calls into existence' is a later, more spiritual, priestly substitute for the ancient title.

The Samaritan Book of Joshua. — In *S. Bibl. Arch.* XXXI, 1909, pp. 115-127, 149-153, M. GASTER defends the theory previously advocated by him that the Samaritan Book of Joshua which he has published is a genuine ancient document, and not a back-translation from the Arabic, by means of an elaborate comparison of this manuscript with the Greek text, which shows that it has independent textual authority.

The Freer Gospels and Shenute of Atripe. — In *Bibl. World*, XXXIII, 1909, pp. 201-206 (pl.), E. J. GOODSPEED presents the evidence for determining definitely the provenance of the recently discovered Freer biblical manuscripts. The evidence shows that they were a part of the library of the so-called White Monastery, near Akhmim, in Egypt, to which also belonged the Berlin group of manuscripts secured for them by Schmidt; also that the great head of this convent was Sinuthius, or Shenute, the founder not only of Coptic Christianity but of Coptic literature, from whom the convent received its name of Anba Shanûdah. The author also discusses the perplexing subscription at the close of Mark in the gospels manuscript, suggesting a view as to the identification of Timotheus which differs from that presented by Professor Sanders recently at Toronto (*A. J. A.* XIII, 1909, pp. 130-141), and summarized in the *Nation*, December 31, 1908.

Birthplace of David and of Christ. — In *Or. Lit.* XII, 1909, cols. 65-69, P. HAUFF seeks to show that there is only one authentic old passage in the Book of Samuel that speaks of Bethlehem in connection with David. In this passage *beth-lehem* is not the name of a town, but means "the house of meat," or sacrificial banqueting-hall, to which David went to celebrate the annual feast with his clan.

Galilee in the Time of Christ. — In *Bibl. World*, XXXII, 1908, pp. 405-416, E. W. G. MASTERMAN attempts to reconstruct from the Galilee of to-day, with the results of modern research, Galilee in the time of Christ, giving especially an interesting picture of Nazareth itself and its life.

The Parasitic h in Minaean. — In *Z. Morgent. Ges.* LXII, 1908, pp. 708-713, F. PRAETORIUS claims that the so-called parasitic h in Minaean is not to be regarded as a vowel-letter, as has often been maintained, but is to be explained after the analogy of the parasitic h in the Soqotri language.

ASIA MINOR

Gergis and Marpessus. — In *Klio*, IX, 1909, pp. 10-13 (map), R. KIEPERT examines the literary evidence for the location of the towns of Gergis and Marpessus in the Troad, and concludes that they must be placed north-east of Troy and south of Abydos.

Cappadocian Tablets in Liverpool.—In *Annals of Archaeology and Anthropology*, I, 1908, pp. 49–84 (15 pls.), T. G. PINCHES publishes with transliteration and translation twenty-three Cappadocian tablets belonging to the Liverpool Institute of Archaeology. A. H. SAYCE, *ibid.* pp. 81–82, adds notes upon these tablets.

The Language of Mitanni.—In *Mitt. Vorderas. Ges.* XIV, 1909, pp. 1–127, F. BORK makes a new attempt to solve the problem of the decipherment of the letter written in the Mitanni language that was found among the tablets of Tell el-Amarna in 1888. He rejects the conclusions of Messerschmidt and Jensen, and brings forward an entirely new system, according to which he reaches the conclusion that Mitanni belongs to the Caucasian group of languages, and is akin to the language of the second column of the Persepolis inscriptions and to the Altaic languages.

The Allies of the Trojans.—In *Z. Ethn.* XI, 1908, pp. 945–950, C. SCHUCHHARDT, after identifying the Cetius as flowing into the Caicus near Pergamon, the Mysius as forming practically the head waters of the Caicus, *i.e.* the modern Gelembek-Tschai, the Phrygius as the Kum-Tschai, which empties into the Hermus near Magnesia, and the Lycus as flowing past Thyatira into the Phrygius, concludes that just as the Ceteioi seem to have lived on the Cetius, so the Mysians, Phrygians, and Lycians of the Trojan allies lived in the valleys of the above-named streams. He calls attention to the fact that in the Doloneia they are grouped together as being *πρὸς Θύμβρην* just as the peoples that have come by sea, Carians, Paeonians, Leleges, Caucones, and Pelasgians, are said to be *πρὸς ἄλός*. A similar list is found in the Catalogue of the Ships, the discrepancies of which from the list in the Doloneia are accounted for by the author, so that he concludes that the Lycians here named have nothing to do with the Lycians of historical times in southwest Asia Minor. Thus all the Trojan allies came from near the Troad, from the old-time realm of Tantalus, extending from the Hermus River to the Sea of Marmora. (Cf. Aesch. ap. Strabo, XII, end.)

Proconnesus and Its Neighbors.—The Marmara Islands, with their inhabitants and their antiquities, are briefly described by F. W. HASLUCK, *J.H.S.* XXIX, 1909, pp. 6–18 (3 pls.; 3 figs.).

The Mercenaries and Military Colonies of Pergamon.—In *R. Arch.* XII, 1908, pp. 364–389, A. J. REINACH continues (see *A.J.A.* XIII, p. 200) his discussion of the military affairs of Pergamon. The Greek citizens were unwarlike and largely exempt from military service, the various native peoples intractable and only half subdued. The Pergamene kings (as also the other Hellenistic rulers) depended upon mercenaries for their soldiers, and these were sought chiefly outside of their own kingdom. The Hellenistic armies were seldom very large. Among the mercenaries of the Pergamenes the Mysians are especially important. The writer discusses the geographical position and extent of the Mysians. In the Pergamene decree (*Orientalis graeci inscr. sel.* No. 338) the Mysians to whom rights of citizenship are granted are not the inhabitants of the mountain regions, but members of military colonies. *Ibid.* pp. 102–119 (2 figs.) the relations of Pergamon to the Galatians, the Masdyenians, and the Kyrrians (Khurds), all of whom furnished contingents to the Pergamene armies, are discussed. Masdye, the city of the Masdyenians, is identified with Mastya, which Pliny (*N.H.* VI, 5) mentions as a colony of Miletus.

The Ionic Coast South of Ephesus.—In *Jh. Oest. Arch. I.* XI, 1909, Beiblatt, cols. 135-168 (map; 15 figs.), J. KEIL gives an account of a journey along the coast of Ionia south of Ephesus in the spring of 1905. At Pygela there are considerable remains of the town wall, a round building, a rock-cut tomb, and an aqueduct. Southwest of Scalanova lies the site of Marathesion, where many pieces of wall, bits of pottery, fragmentary sculptures, and other remains were found. On the hill at Ambartepe, between Marathesion and Anaea, there are remains of a settlement, as yet unidentified. East of this place are some walls of fortification which are perhaps Carian. Ancient remains were also found at Kokol and at Kadi Kala. Ten Greek and one Latin inscription were copied on the trip.

Hittite History.—In *Or. Lit.* XII, 1909, cols. 97-106, 145-154, 193-207, E. BRANDENBURG gives an important summary of Hittite history, so far as it is known at present, from Babylonian, Egyptian, Assyrian, and native sources, and defends his theory that the art of Asia Minor is primarily of Hittite rather than of Greek origin against the numerous attacks that have recently been made upon it.

An Inscription from Side.—H. VINCENT makes the suggestion that the beginning of the Greek Jewish inscription discussed in *J.H.S.* XVIII, p. 195, should be filled out, not with a numeral, as there proposed, *δεκάκις* or *πολλάκις φροντιστής*, but rather with the Jewish name *Ἰσάκις*, which fits the space admirably. (*J.H.S.* XXIX, 1909, p. 130.)

The Austrian Expedition to Lydia.—The expedition of the Austrian archaeologists J. Keil and A. von Premerstein to Lydia has led to valuable results in the discovery of about 380 inscriptions, some of them in old Lydian characters. (*Athen*, February 20, 1909, p. 234.)

GREECE

ARCHITECTURE

Greek Architecture.—In his new book on Greek architecture Professor MARQUAND gives a complete exposition of the subject of Greek building in all its details. He discusses in succession the materials and methods of construction; the treatment of walls, columns, entablature, ceilings, etc.; the proportions employed by Greek architects; the various decorative devices; composition and style; different kinds of buildings as represented by actual remains, with a brief treatment of town walls and naval architecture. An index of Greek terms follows. The book is very complete, and the only work of its kind in English. (*Greek Architecture*, by Allan Marquand, New York, 1909, The Macmillan Company, x, 425 pp.; 392 figs. 8vo. \$2.25 net.)

Architectural Remains of the Asclepieum at Athens.—In *Ἐφ. Ἀρχ.* 1908, pp. 255-284 (2 pls.; 18 figs.), PH. BERSAKES gives a detailed description of the architectural remains of the Asclepieum, with restorations of plans and elevations of the buildings within the precinct. These include the east stoa; the later temple; the smaller west stoa; the western Ionic temple; the eastern Ionic temple; a second stoa with horizontal roof; the later propylon (?); a circular building; and the old temple (?) of poros.

The Tholos at Epidaurus.—In *Sitzb. Berl. Akad.* 1909, pp. 536-540 (3 pls.; 2 figs.), P. KAVVADIAS gives a preliminary report of the results of his study of the *tholos* at Epidaurus. The stylobate was of *poros*. The lower

diameter of the Doric columns was 1 m. The coffered ceilings were beautifully enriched. Details of the wall are now known for the first time. The so-called frieze encircled the building just above the orthostatae. The door resembled the northern door of the Erechtheum. The Corinthian columns stood on a podium of black marble. The floor within was covered with lozenge-shaped slabs of light and dark marble, with a circular slab of white marble at the centre. The building probably had windows, and there was no opening in the roof, which was crowned with a fine anthemion. The illustrations give details and restorations. In *Πρακτικά* for 1907 (published 1908), pp. 183-186 (2 figs.), he gives a brief account of his restoration of the building and the evidence upon which it is based.

The Dexileos Monument.—At the May (1908) meeting of the Berlin Archaeological Society, A. BRÜCKNER described the monument of Dexileos in the original form, which has been ascertained in the recent thorough exploration of the Ceramicus burial ground. The whole structure was some 6 m. high and consisted of a rough stone basement of about 2 m., a limestone wall which followed the curve of the road and had projecting pillars, and a marble architrave, above the middle of which the familiar relief stood as an acroterion, with a siren above the pillar at either side. The whole precinct seems to have been sacred to Artemis Soteira, and the graves to have been put there under her protection as patroness of the dead. Similarly, on some Attic and Boeotian grave reliefs, the dead are represented as on their way to meet the gods of the future world, and children as making offerings to the gods who must protect them. (*Arch. Anz.* 1908, cols. 220-221.)

The Frieze of the Mausoleum at Halicarnassus.—In *Jh. Oest. Arch. I.* XI, 1909, Beiblatt, cols. 205-206 (fig.), G. NIEMANN argues that the entablature of the Mausoleum at Halicarnassus should be placed above the columns without the frieze, and that the latter should be attached to the cella wall. Such a restoration in plaster has been set up in the Akademie der bildenden Künste in Vienna.

SCULPTURE

Vitruvius and the Canon of the Proportions of the Human Figure.—In *R. Arch.* XIII, 1909, pp. 46-78 (5 figs.), V. MORTET discusses the ancient canons of human proportions. The chief natural proportion is that of the head to the total height (about 1:7½). The Polyclitan system was based on the dactyl (Galen, *De Plac. Hipp. et Plat.* ed. Müller, I, p. 426). The canon given by Vitruvius (III, 1) is probably that of Lysippus (1:8). More or less explicit references to canons are contained in the *De Physiognomia*, of the third century A.D., in Philostratus' *Imagines*, in Martianus Capella (VII, 739), in St. Augustine, *De Civ. Dei*, XV, 26, and in a *Formulary of the Eighth Century for the Foundations of Buildings and Bridges*, published in *B. Mon.* 1907, nos. 5-6 (separately, with additions, 1908). This last appears to be derived from the canon of 1:8.

The Significance of Drapery in Greek Art.—In *Jb. Kl. Alt.* XXIII, 1909, pp. 233-245, F. NOACK discusses the significance of drapery in the development of Greek art.

The Technique of Bronze Sculptures.—In *Jh. Oest. Arch. I.* XI, 1909, pp. 212-228 (9 figs.), E. FERNICE examines in detail seven bronze sculptures.

He shows that the hair of the bronzes found at Herculaneum was usually cast separately. This was the case with the long-haired youth (Rayet, *Mon. de l'art ant.* II, Pl. 24), but all the hair now attached to the head, except a few locks on the neck, is modern. The hair and beard of the Dionysus, once supposed to be a portrait of Plato, were also cast separately. This head must have been much injured when found, but except for the eyes and some small pieces it is ancient. The head of a youth of the Aeginetan school from Herculaneum is really archaic and not a Roman copy. The portrait bust with the peculiar headdress is that of a lady from Rome or Herculaneum, but all of the hair is modern. Attention is also called to the angular cutting for attaching the head of a youth in Berlin published by Furtwängler (*Meisterwerke*, Pl. 32); and to the many small pieces set in in the "praying boy." These pieces were originally invisible, and only came to light when the statue was worked over. In places the original surface has been removed to a depth of half a millimeter, which explains why the modelling is sometimes weak and again fresh and strong. In the bronze boxer in Rome the legs were broken off when found; but the numerous scratches were added by the sculptor for artistic effect, like the drops of blood on the right ear. Very likely copper, or some red substance, was used to heighten the effect.

The Frieze of the Treasury of the Cnidians at Delphi.—In *R. Ét. Anc.* XI, 1909, pp. 1-29 (6 pls.), H. LECHAT corrects in certain details Homolle's description of the frieze of the treasury of the Cnidians at Delphi. Heracles and Cybele are fighting against different opponents and belong to different groups. Heracles fights with the spear, not with the bow. The figure with the crest of his helmet supported by a cantharus is not Dionysus, but a giant. The peculiar shape of the support is explained by the fact that all the helmets worn by the giants are of fantastic design. This giant was one of the antagonists of Cybele and is fleeing in terror from her lions. Cybele is identified by a hole for an earring, and cannot be Dionysus, as Wolters thought. Lechat identifies the gods as Apollo, Zeus, Ares, Hermes, and the Dioscuri; and the goddesses as Cybele, Artemis, Hera, Athena, two Aeolids, and perhaps Amphitrite, who drives Poseidon's chariot. In addition there was the charioteer of Zeus, who cannot be identified. In *Éph. 'Apx.* 1908, pp. 245-254 (3 figs.), K. A. ROMAÏOS proves that the figure at the eastern end of the frieze, hitherto identified as Aeolus with two wind-sacks, represents in reality Hephaestus working a pair of bellows which are connected by tubes with a small blacksmith's furnace, in which he is heating masses of metal to be hurled against the giants. In *R. Ét. Anc.* XI, 1909, pp. 129-133, H. LECHAT shows that the winged horses of the west frieze are those of Athena. The goddess herself has wings, doubtless because a winged goddess was so familiar an object in Ionic art that wings were added even where they did not belong. The horses were winged because their mistress was. Athena and Aphrodite with their chariots are placed symmetrically at opposite ends of the frieze.

Myron's Marsyas and Athena.—A fourfold identification is discussed at some length by B. SAUER in *Jb. Arch. I.* XXIII, 1908, pp. 125-163 (2 pls.; 13 figs.); namely, that the pair of figures on certain Athenian coins of Hadrian represent the group of Athena and Marsyas with the flutes which Pausanias saw on the Acropolis opposite the north front of

the Parthenon; that this group was the same as the Satyr and Minerva of Myron mentioned by Pliny; and that, in addition to the figure of Marsyas, long since recognized by Brunn in the Lateran satyr, we possess the type of the Athena as well, in four or five replicas at Paris, Madrid, Rome, Dresden, and Toulouse. A restoration of the group made at the Munich gallery by J. Sieveking (*Arch. Anz.* 1908, cols. 341-343; pl.) is criticised by Sauer as departing too far from the relief-like arrangement intended by the artist. The Toulouse Athena is discussed by E. MICHON in *B. Soc. Ant. Fr.* 1908, pp. 335-343 (fig.).

Polyclitus.—The Polyclitan statue type, called by Furtwängler the *Ruhigstehender Athlet*, of which many replicas are known, is the simplest of this artist's youthful figures and most closely resembles the older Peloponnesian canon. It is therefore earlier than the Doryphorus and the Barracco type. The original may have represented a god or hero, as the Paris statuette, a nearly contemporary replica, is in the attitude of pouring a libation. (G. LIPFOLD, *Jb. Arch. I.* XXIII, 1908, pp. 203-208; 8 figs.)

An Athena of Phidias.—In *Jh. Oest. Arch. I.* XI, 1900, pp. 169-211 (2 pls.; 32 figs.), W. AMELUNG publishes a head of Athena of Pentelic marble formerly in the Villa Carpegna and now in the possession of an antiquarian at Rome. The helmet, which was a modern restoration, has been removed. There are four other copies of this head, one in Seville, one in the Vatican, one in Vienna, and one in the British Museum. An arm and a foot of marble were found with the Vatican head, and two marble feet with the Vienna head. These were not broken off, but were made of separate pieces; which suggests that the statues were acrolithic and that the bodies were made of some other material, perhaps gilded wood. A copy of the body is to be found in the torso known as the Athena Medici. A relief at Ambelokipi helps us to restore the work as follows: the goddess was standing with helmet on her head and shield on her left arm, grasping her spear in her left hand and holding a patera in her right. Below was the serpent; and beside the shaft of the spear on the ground, the owl. The fact that the figure appears on Athenian coins of the time of Hadrian, and that a statuette reproducing it was found on the Acropolis prove that the original stood in Athens. Furthermore, it is clearly the work of Phidias. Amelung argues that this is really a copy of the Lemnian Athena. Furtwängler's identification of the Dresden Athena as the Lemnia is wrong. If the Bologna head is compared with undisputed works of Phidias, it is seen that the treatment of the hair and of the mouth is very different. A male head in Copenhagen, a Hermes in the Antiquarium at Rome, the head of a youth in the Vatican, and a bearded head in Athens are to be connected with the Bologna head, and all are examples of Argive art. He does not, however, deny the resemblance of the Dresden torso to Attic art of the fifth century. In *W. kl. Phil.* XXIX, 1900, cols. 632-640, F. NOACK disputes Amelung's conclusions on stylistic grounds and argues for the identification proposed by Furtwängler.

The Central Group of the East Pediment of the Parthenon.—Prandtl's reconstruction (*Ath. Mit.* XXXIII, 1908, pp. 1 ff., cf. *A.J.A.* XII, pp. 361-362) on the basis of the Madrid puteal is criticised by B. SAUER, *ibid.* pp. 442-444. The new fragments afford no proof for this arrangement, and the flying Nike in the centre would conflict with the spear held by Athena.

Aphrodite ἐν κήρῳ.—At the May (1908) meeting of the Berlin Archaeological Society, A. TRENDLENBURG discussed the literary traditions of the Aphrodite ἐν κήρῳ of Alcamenes and showed, from Pausanias, that it was a herm; and from Lucian, that it had the pillar form only to the hips, not to the shoulders. The Pergamene copy of the Hermes Propylaeus of the same artist supports the tradition of the herm form. The type of the Aphrodite is still unknown, for the statue type of Venus Genetrix, of which the Venus of Fréjus is the most famous example, and which since 1887 has commonly been identified with the famous work of Alcamenes, does not fulfil the conditions. (*Arch. Anz.* 1908, cols. 514–520.)

ὁ παῖς ἀφ' ἑστρίας.—In *J.H.S.* XXIX, 1909, pp. 1–5 (pl.), K. ESDAILE discusses a new fifth-century type of statue, two copies of which are now in Rome. It represents a young boy, wearing a peculiar kind of loose tunic and carrying a pig, and seems to fit the descriptions of the *παῖδες ἀφ' ἑστρίας*, young Athenian boys and girls chosen by lot to be initiated at Eleusis at the public expense and to serve as mediators between the priest and the ordinary mystæ. The original of this type may be referred conjecturally to Calamis.

Lysippus' Portraits of Alexander.—Two of the gold medallions from Abukir recently published by H. Dressel are portraits of Alexander with very bold personal characteristics, and are probably copied from statues by Lysippus. The most striking (Fig. 1) follows exactly the ancient description of Alexander gazing upward, and undoubtedly represents the head

of the famous *δορυφόρος*. They give a new idea of the realistic power of the work of Lysippus. (H. THIERSCH, *Jb. Arch. I.* XXIII, 1908, pp. 162–169; 4 figs.)



FIGURE 1.—ALEXANDER, GOLD MEDALLION.

The Pedagogue of the Niobid Group.—In *R. Arch.* XIII, 1909, pp. 79–82 (pl.), P. G. HÜBNER discusses the documentary evidence and concludes that only nine of the figures of the Niobe group in Florence (counting Niobe and the youngest daughter as one) were discovered in 1583. The pedagogue was not among these. Michaelis (*Jb. Arch. I.* 1892, pp. 94 and 97) dates the Cambridge sketch book later than 1583 because it contains a sketch of the pedagogue. That

argument is now seen to be invalid. The date of the sketch book is rather 1572. Two sketches of the pedagogue in the *Berolinensis* (Fols. 53 and 54; Nos. 132 and 133), a collection of drawings made apparently under Pius V (1566–1572), are published. These prove that the pedagogue was known before 1583.

Reliefs from Epidaurus.—At the first meeting for archaeologists held at the Austrian School in Athens I. N. SVORONOS read a paper on some reliefs from Epidaurus in the Athens museum. The fine slab No. 1392

representing a youthful hero presenting a horse to Asclepius and Epione he interprets in the light of a passage in Pausanias which relates that after the death of Hippolytus Asclepius brought him back to life and that he in gratitude offered the god a sacrifice of twenty horses. Relief No. 1424 he interprets as the child Asclepius with his nurse, the nymph Trygon. (*Hellenic Herald*, III, 1909, p. 53.)

An Invitation to Dance. — In *Z. Bild. K. N. F.* XX, 1909, pp. 101-108 (10 figs.), W. KLEIN discusses the satyr playing the *scabellum* in the Uffizi gallery. Imhoof-Blumer showed long ago that it was represented with a seated female figure on a coin of Cyzicus. Eight copies of the satyr and seven of the seated figure, more or less complete, are extant. The best head of the former is the one from Vienne now in Paris; and the best head of the latter is in Dresden, attached to a body to which it does not belong. Klein restores the satyr by adding the Vienne head to the Uffizi body; and the female figure by adding the Dresden head to the Brussels torso. He interprets the group as a satyr asking a maenad to dance, and she is removing her sandals by way of preparation. The original group was probably in Cyzicus. A cast of the restoration (Fig. 2) has been set up in Prague.



FIGURE 2. — SATYR AND MAENAD.

The Base of the "Palestrita" in Naples. — In *Atti R. Accademia di Archeologia, Lettere, e Belle Arti di Napoli*, I, 1908, pp. 43-51, G. OLIVERIO discusses the inscription on the base of the statue of the boxer known as "il Palestrita," in the Naples museum (Catalogue No. 212). He restores it

Ἀφροδισιεὺς Κωβ(ι)άλα[ι-]
νος εἰργάσατο.

He identifies this Aphrodisieus with an Aphrodisius, son of Demetrius, known from an inscription (Kaibel, *Insc. Gr. et Sicil. et Ital.* No. 1494), and argues that he belonged to the Sicyonian school.

A Roman Copy of an Archaic Greek Bronze. — A statue, much restored, and exposed to the weather for three centuries behind the casino of the Villa Borghese, is considered by A. DELLA SETA (in *B. Com. Rom.* XXXVI, 1908, pp. 3-20; 3 pls.) to be a Roman copy of an archaic Greek

bronze of the early fifth century a.c. In his opinion it affords important evidence of early methods in treating the nude figure, in the attempt to represent the beginning of motion, etc.

A Torso of an Apollo in Chicago. — The torso of an Apollo 34 inches high, acquired in Rome about ten years ago and now in Chicago, is briefly published in the *Bulletin of the Art Institute of Chicago*, II, 1909, pp. 33-34 (fig.). The head is missing, as are both arms and both legs below the knee. The pose is not unlike that of the bronze Apollo Citharistes of Pompeii. The Apollo Despuig at Majorca and a small bronze Apollo from Pompeii belong to the same type.

Venus on the Bow of a Ship. — In *B. Soc. Ant. Fr.* 1908, pp. 266-267, C. RAVAISON-MOLLIEN discusses the Graeco-Roman statue in the Louvre, representing a half-draped woman standing on the bow of a ship. She may be compared with the Nike of Samothrace and with Isis Pharia, but represents the Venus of successful voyages. The swords on the sides of the ship are to be explained by the connection of Mars with Venus.

The Pergamene Fragment in New York. — The Pergamene fragment acquired by the Metropolitan Museum in 1908 was found at Cervetri about eight years ago. It is of Parian marble, and represents the lower part of a fighting Gaul. The cutting of the base shows that the opponent formed part of the group. The upper half of the figure was made separately and attached by a dowel and by cement. The missing portion of the foot seems also to have been attached by cement. There was a support from the base to the thigh, which is one of the earliest examples of a practice common in Roman times. The nearest analogy to this Gaul is the "Warrior of Delos," now in Athens, which is perhaps the work of Niceratus. It is probable that the same sculptor made both groups. (*J. MARSHALL, B. Metr. Mus.* IV, 1909, pp. 45-47; fig.)

Modern Forgeries of Ancient Marbles. — In *Le Musée*, V, 1908, pp. 285-294 (4 figs.), O. THÉATÈS continues his discussion of forged antiquities (see *ibid.* pp. 171-182; *A.J.A.* XIII, p. 221) and shows that it is not difficult for one who is well acquainted with genuine sculptures to detect a modern forgery. The character of the fractures, the surface finish, and the technical processes of the sculptor furnish abundant evidence for the detection of fraud. He recommends a careful study of the fragments of genuine statues and a comparison with forged pieces for those who would acquire expert knowledge.

VASES AND PAINTING

The Sarcophagus from Hagia Triada. — In *Arch. Rel.* XII, 1909, pp. 161-185 (3 pls.), F. VON Duhn discusses the painted sarcophagus found at Hagia Triada in 1903 (see *A.J.A.* XIII, p. 209). The scene on one of the long sides is an *ὀλοθυμός* (cf. *Odys.* IV, 750 ff. and III, 450 ff.), as the flute-playing and the basket of barley show. On the other long side the two obelisks supporting double axes represent the entrance to the lower world. The offering being poured into the vessel is the blood of the bull sacrificed on the other side. The religious character of the scene is apparent from the costume of the woman pouring the libation, as well as from the five figures which follow. The man at the right carries a ship

in which the spirit of the dead is to make the journey to the other world. The calves carried by the two other men are intended for provisions. All three approach the dead man, who is standing in front of his tomb. On one of the ends two women in a chariot are driving a span of horses, each holding two reins. Von Duhn cannot explain this scene. On the other end is a similar chariot drawn by griffins and likewise holding two figures, one of whom is the dead man, the other who drives is a woman. The bird above the griffins represents the soul of the dead, his Ba. The sarcophagus should probably be dated in the second half of the fifteenth or perhaps at the beginning of the fourteenth century B.C.

Neolithic and Primitive Minoan Pottery from Phaestus.—The objects found in the neolithic and earliest Minoan strata under the palaces at Phaestus are described by A. Mosso in *Mon. Ant.* XIX, 1908, cols. 141–223 (2 pls.; 48 figs.). In general the vessels are similar in shape and decoration to the neolithic pottery from Hissarlik, Sicily, Italy, and other parts of Europe, as well as from Cnossus, and they show most of the characteristics of those of the Copper and early Bronze Ages. The deposits at Phaestus are not so deep as those at Cnossus, and are probably later. They contain more colored pottery and less incised ware, the latter also of simpler designs. All is hand wrought. There is no evidence that any of the vessels were used for cooking. The clay is of three kinds: red (oxide of iron), black (same mixed with carbon), and a silicious light-colored clay, like that of the Mycenaean ware. Both light and dark ware was made at the same time and with the same forms and designs. Among the devices for decoration beside incised lines and painting are parallel wavy furrows, finger-nail indentations, small protuberances, punched holes and dots, and a rude human figure to be set on the rim or shoulder of a vase. Both incised and painted decoration is in straight lines, curves and circles being very rare and late, and spirals unknown. Among other significant objects found are a hut floor of beaten earth; a very rude female idol and a lump of wrought magnetic iron, indicating a place of worship; many astragali of sheep and oxen, probably for a religious use; vertebrae of whales; many pectunculus shells; knives of obsidian from Melos; bones of birds and animals used for food but none of the horse or dog; other circumstances indicate the absence of domesticated dogs. The origin and spread of primitive ceramic inventions and the duration of the Early (neolithic) Minoan period are here discussed.

Sepulchral Amphorae in Boston.—In *B. Mus. F. A.* VII, 1909, pp. 11–13 (4 figs.), L. D. C(ASKEY) describes three large amphorae in the Boston Museum of Fine Arts, one in the Dipylon style and the other two Boeotian with decoration in relief.

The Laconian Style of Vase Painting.—At a meeting at the British School at Athens, March 19, 1909, J. P. DROOP showed that the Laconian style of vase painting began in the seventh century B.C., after the end of the geometric period, with simple decoration in purple and black, and with a white slip laid over a pink clay. At the close of the seventh century figures and animals in incised technique were introduced; but fifty years later the decay of the style began, signs of which are the abandonment of the slip and degeneration in the patterns. At the beginning of the fifth century slip is no longer found and the style degenerated more and more

until its place was taken at the end of the fourth century by the widespread Hellenistic styles. This pottery was undoubtedly made locally, and is to be identified with the so-called Cyrenaic ware, which is now seen to be Laconian of the sixth century. (*Athen.* April 10, 1909, p. 445.)

The Representation of a Mummy on a Black-figured Lecythus.—In *Arch. Rel.* XII, 1909, pp. 195–203 (3 figs.), R. HACKL publishes a black-figured Attic lecythus lately added to the Munich collection of vases (Fig. 3). Three kneeling figures, two in front and one behind, are appar-



FIGURE 3.—MUMMY ON A GREEK VASE.

ently adoring a bearded head crowned with ivy, which projects from a high, narrow case. In the light of Egyptian wall-paintings this is interpreted as a mummy. This vase and an *ushabti* figure in Cairo which has an archaic Greek head prove that at the end of the sixth century B.C. the Greeks in Lower Egypt knew and probably practised embalming. The vase painter may have had some idea of embalming as an especially complimentary form of burial.

Hischylus the Potter.—An attempt to form an idea of the rather vague figure of Hischylus, whose name appears as "maker" on nearly a dozen vases of the transitional period, leads to the conclusion that he was rather the owner of a pottery, employing other artists to decorate his vases, than himself a professional painter, but that he had a distinct influence in improving the shape of the cylix. A table of the known vases made by him and three tables of transitional vases, based on Klein's lists, are shown and discussed by H. B. WALTERS, *J.H.S.* XXIX, 1909, pp. 103–119 (5 pls.; 2 figs.).

The "Soul Bird."—In *Arch. Rel.* XII, 1909, pp. 204–206 (fig.), R. HACKL protests against the theory that all human-headed birds on Greek vases are "soul birds." Such a one is, however, represented on a Corinthian aryballus in private possession in Munich in which a small figure of a man with outstretched arms lies on his back before a siren.

A Lecythus from Eretria.—In *Εφ. 'Αρχ.* 1908, pp. 151–158 (pl.; 2 figs.), K. A. ROMAIOS publishes a red-figured lecythus from Eretria, remarkable for its representation of a bald-headed Priapus-herm, to which a hunter carrying a hare is offering a leafy branch. The vase, which belongs to the first third of the fifth century B.C., may be attributed with great probability to Hartwig's "Kahlkopfmeister." (*Meisterschalen*, pp. 421–443.)

An Inscribed Rhodian Vase. — In the *American Journal of Philology*, XXIX, 1908, pp. 461-466 (pl.). T. L. SHEAR publishes a vase from Rhodes now in the Metropolitan Museum of New York. It is 11.25 cm. high, with a circumference below the handles of 38.25 cm., and once had a cover. It belongs to a well-known group of which there are thirteen examples in Berlin (see *Jb. Arch. I. I*, p. 152), and probably dates from the end of the fifth or beginning of the fourth century B.C. The simple decoration of bands and the inscription are put on in a brown varnish without any slip. On one side is the irregular iambic trimeter

καλλίστα γὰς ἡ Βρασία ὡς ἐμὴν δοκεῖ,

on the other side the names Δεῖς, Ἑρμᾶς, Ἀραμῆς, and Ἀθαναία. The adjective Βρασία refers to Βράσος, a deme of Lindus, which is perhaps to be identified with the modern Πρασόνγρηι in the extreme south of the island.

An Ionian Crater in Munich. — The museum at Munich has recently purchased the fine bronze crater belonging to Mr. C. Ponsonby and formerly on exhibition in the South Kensington Museum. It was shown in the exhibition of the Burlington Fine Arts Club in 1903. It was found at Ruvo in southern Italy, but is of Ionian style, with Gorgons adorning the bases of the handles. The foot was broken in antiquity and apparently repaired in Campania. (A. SAMBON, *Le Musée*, V, 1908, pp. 295-299; 5 figs.)

Vase Paintings from the Phoenissae of Euripides. — How the scenes of epic and dramatic legends were copied from the stage into illustrated manuscripts and then, with alterations to suit the space, by the makers of metal bowls, and finally used in the moulded clay vases, is illustrated by three "Homeric" bowls containing scenes from the story of Eteocles and Polyneices. Such bowls seem to have been made in series, perhaps using the scenes from an entire manuscript of a play. Their art is of course closely connected with that of the Roman mythological sarcophagus reliefs, and they go back for their models probably to the third century B.C. One of these bowls with the Theban story seems to have a detail, the Bird Observatory of Tiresias, taken from the *periacta* of the stage. Here also for the first time in art is found the southern gesture of beckoning with the back of the hand turned up. (C. ROBERT, *Jb. Arch. I. XXIII*, 1908, pp. 184-203; 2 pls.; 5 figs.)

The Greek Vases recently found at Gela. — Since the last report on excavations at Gela, 1900-1905 (*Mon. Ant. XVII*), a number of important discoveries have been made in the vicinity. The terra-cotta remains of the very ancient temple at Molino a Vento (*A.J.A.* XII, 1908, p. 108), and a geometric vase of the VII-VI centuries are of local manufacture, the latter showing Graeco-Oriental influence. A large crater *a colonnette* with a bird-griffin is late Corinthian. Two black-figured cylices are probably early Attic with points of resemblance to Corinthian and Ionic. The larger one, besides the sphinx carrying a man (*A.J.A.* XI, 1907, p. 361), has the unusual device of a horse's head on a shield. An inscribed Attic lecythus of early severe red-figured style bears the new and probably foreign maker's name, Gales, and a figure of Anacreon in a scene expressive of the erotic and Dionysiac character of his poetry. A slightly later severe red-figured Attic lecythus gives the new καλός-name ΠΥΘΑΙΟΣ. A fine bronze herm-statue of a fifth-century type and perhaps representing Hermes Psychopompus

is made by the *cire-perdue* process and seems to have the artificial patina or metallic lacquer mentioned by Plutarch. A rare bronze hydria with cast handles and foot and hammered body is from Chalcis, second half of the sixth century. A covered kettle used as an ossuary is coated on the inside with red, the primitive funeral color. A small rectangular altar or pedestal of terra-cotta has a chariot race in relief resembling Dipylon designs. Two decorative marble statuettes are headless draped female figures, in attitudes popularized by Praxiteles. The crossed legs of one, probably a Hera or a Demeter, are rare in a female figure. The author believes that the site of Gela was never inhabited after the destruction of the city in 280 B.C. (P. Orsi, *Mon. Ant.* XIX, 1908, cols. 89-140; 5 pls.; 18 figs.)

INSCRIPTIONS

The Inscribed Disk from Phaestus. — In *Rend. Acc. Lincei*, XVII, 1908, pp. 642-651 (pl.), L. PERNIER gives additional information in regard to the inscribed disk found at Phaestus in 1908 (see *A.J.A.* XIII, p. 78). Excavations undertaken along the north side of the acropolis brought to light a building contemporary with the early palace, though not connected with it.



FIGURE 4. — INSCRIBED DISK FROM PHAESTUS.

At the west end of this building was an enclosure with strong walls in which were seven compartments similar to those found in the floor of the magazines at Cnossus. South of this was a room resembling the so-called treasury at Hagia Triada, and here the disk was found. It had fallen down from above at the time of the destruction of the building, which the vases show occurred at the end of the Middle Minoan period. The disk (Fig. 4) is from 158 to 165 mm. in diameter and 16 to 21 mm. thick and has stamped upon it 241 signs in the older form of the Cretan linear script. There are 123 signs on one side and 118 on the other. There are 45 different characters, but apparently no numerals. The words are written with from two to seven signs. The script is evidently that in use at Phaestus at the time of the destruction of the first palace in the early centuries of the second millennium B.C.

The Pre-Hellenic Inscription from Lemnos.—In *Rend. Acc. Lincei*, XVII, 1908, pp. 652–666 (fig.), R. PETTAZZONI argues that the words *Zeronaiō* and *Zeronai* of the pre-Hellenic inscription from Lemnos (see *A.J.A.* XII, pp. 462–463) give the name of a Thracian goddess whom he would call *Zerona*. He thinks that a Thraco-Phrygian race occupied Lemnos and neighboring islands in prehistoric times and that this inscription belongs to that people. There is no reason for believing that Lemnos had an Etruscan population.

Emendations to the Delian Treasure Lists.—In *Jh. Oest. Arch.* I. XI, 1909, Beiblatt, cols. 185–196, W. CRÖNERT discusses eighty-three places in the Delian treasure lists published in *B.C.H.* and proposes new readings.

Various Inscriptions.—In *Hermes*, XLIV, 1909, pp. 41–59, A. WILHELM discusses at length *I.G.* IX 2, 1109; IX 2, 1106; IX 2, 1138, and the inscription from Clitor published in *Ath. Mitt.* VI, p. 304, and proposes various restorations. In *I.G.* IX 2, 1109 he reads l. 80 ἐν[οικούντων; in l. 83 εἰ δ[ὲ μὴ, τὸν μὲν ἐλευθερον ἀποτίνειν τ]ῇ κτλ.; in l. 85 ταμ[ών· ἐὰν δὲ δούλος ᾖ, μαστ]ιγούσθαι; in l. 86 νομοφυλάκ[ων ἐπὶ τῆς ἀγορᾶς (οἱ ἐν τῷ κύφῳ) πλη]γὰς; in l. 87 ποιείσθαι; in l. 88 διασαφ[ο]υμένους ἀρχοντας; l. 89 ἀντίγραφ[ον εἰς λεύκωμα διὰ Φ]ίλωνος; l. 90 νε[ωκορίον γενομένης ἐγ]δόσεως; l. 91 πα[ρα]κολ[ουθῶσιν οἱ παραγινόμενοι; l. 92 διαπαρὰδόσ[θ]ω [δὲ τὸ ψήφισμα τότε καὶ τοῖς]; l. 93 [[στρατηγούς]] [καὶ νομοφύ]λαξιν.

Ἄνθρωποι βίαιοθάνατοι.—In *Arch. Rel.* XII, 1909, pp. 224–233, S. WIDE discusses two inscriptions (Dittenberger, *Sylloge*, 2d ed., Nos. 567 and 633) prescribing the length of time required for purification after certain acts regarded as bringing pollution. See S. Reinach, *Arch. Rel.* IX, pp. 312 ff.

An Inscription from Alabanda.—In *B.C.H.* XXXIII, 1909, p. 170, H. GREGOIRE gives an improved text of part of the inscription from Alabanda, published *ibid.* X, 1886, p. 311, no. 4; XXXII, 1908, p. 204.

Notes on the Law from Aigiale.—In *Ἐφ. Ἀρχ.* 1908, pp. 193–196, S. BASES publishes a few criticisms on the readings and restorations in a law from Aigiale published by Hiller von Gaertringen and E. Ziebarth in *Ἐφ. Ἀρχ.* 1907, pp. 187 ff. (see *A.J.A.* XII, p. 360).

An Inscription from Amphissa.—In *Ἐφ. Ἀρχ.* 1908, pp. 159–194 (pl.), A. D. KERAMPOULLOS republishes with full textual notes and commentary an inscription of the second century B.C. from Amphissa. It is a copy of a letter from the city of Amphissa to the city of Scarpbia, recording public honors granted by the former to a retiring public physician, Menophantus. The inscription was found by the author in 1899 and published by Vollgraff, *B.C.H.* 1901, pp. 234 ff., without sufficient recognition of the former's work upon it.

A Gold Amulet.—In *Bonn. Jb.* 118, 1909, pp. 158–175, M. SIEBOURG publishes a leaf of gold, evidently an amulet, inscribed with thirteen lines in Greek letters. It is now in the Berlin Museum and came from Tyre, but the place where it was found is not known. It reads ἐν τῷ ὀνόματι τοῦ Θεοῦ καὶ Ἰησοῦ Χριστοῦ καὶ πάντων ἁγίων. ραββι σκανομα λουλα αμρι κτοραθ ηναθα βαβαρονακ· ἐπευχόμε[ν]αι τὸ μ[ε]γαλὸν ὄνομα Ἰάω ἀποστρέφον τὴν ἐπιφε[ρ]ομένην ὀφθαλμ[ί]α[ι]ν καὶ μη[κ]ε[ρ]εῖς ἐξ ὁφθαλμ[ῶ]ν. . . . This is translated *Im Namen Gottes und Jesu Christi und des Heiligen Geistes! Grosser Statthalter der Tiefe, Loula-amri, gebunden hat die Augen deine Tochter des Fiebers. Dem, der den grossen Namen Iao anruft, wende ab die angreifende Augenkrankheit und lass nicht mehr die Augenkrankheit.* . . .

COINS

Early Coinage. — The publication in French of the lectures of I. N. Svoronos on early money is continued in *R. Belge Num.* 1909, pp. 113–129 (3 pls.; 2 figs.). The author accepts the identification by Waldstein of the bundles of iron *obeloi* found in the Argive Heraeum as early forms of money, but rejects the belief that various small objects of bronze from the same place are thus to be reckoned. An English version of the same articles is begun in *A. J. Num.* XLIII, 1908–1909, pp. 33–45 (ill.).

Technique of Ancient Coinage. — A number of conclusions concerning the ancient coin-technique that have been reached through long study and experimentation by M. PICCIONE are outlined in an article sent by him to the Numismatische Gesellschaft in Vienna (*Monatsblatt der Numismatischen Gesellschaft in Wien*, VIII, pp. 19–22). They chiefly touch upon the preparation of the *flans* for plated and other struck coins, and of the moulds for cast coins. A further communication is promised on the preparation of dies. On these matters Signor Piccione's conclusions differ widely from those generally held.

Amazons on Greek Coins. — The accounts of Amazons in current dictionaries of archaeology (Roscher, Daremberg and Saglio, Pauly-Wissowa) are corrected and supplemented by F. IMHOOF-BLUMER on the basis of coin-types in *Nomisma*, II, 1909, pp. 1–18 (2 pls.).

Ephesian Tesserae. — BARCLAY V. HEAD suggests that certain *tesserae* struck at Ephesus in quite early imperial times, having on the obverse the figure of a stag, and on the reverse a bee, the inscriptions being in the past unexplained, may have been a sort of "bee-charm." (*Num. Chron.*, 1908, pp. 281–286; fig.)

Coinage of Abdera. — The third part of *Nomisma*, II, 1909, pp. 1–30 (3 pls.), is given to a detailed study of the chronology of the coin-issues of Abdera by H. VON FRITZE, which serves as an introduction to the presentation of the coinage of that city in the Berlin *Corpus*.

Coinage of Beroia. — The question of the chronology of the somewhat rare bronze coinage of the Macedonian city of Beroia is discussed by HUGO GAEBLER in *Nomisma*, I, 1908, pp. 23–28 (pl.), as a supplement to vol. III, 1 of the Berlin *Corpus Nummorum*.

Lacedaemon versus Allaria. — A rare coin-type with a helmeted head on the obverse, and a seated Heracles on the reverse, has long been a subject of controversy concerning attribution. E. J. SELTMAN joins those who would assign it to Lacedaemon instead of to Allaria. He identifies the head as that of the Amyclaeon Apollo. (*Num. Chron.* 1909, pp. 1–6; 2 figs.)

The Menas-Inscription and Coinage of Sestus. — In connection with a detailed study of the coinage of Sestus, and of the hitherto poorly understood inscription in honor of Menas, H. VON FRITZE shows that during the period 160–120 B.C. Sestus issued coins in honor of the kings of Pergamon, who had given her autonomy and the right of coinage. (*Nomisma*, I, 1908, pp. 1–13; pl.)

The Berlin Corpus Nummorum. — In *Nomisma*, II, 1909, pp. 36–41, H. VON FRITZE speaks of the method of the Berlin *Corpus Nummorum*, chiefly in answer to certain strictures of M. L. STRACK in the *Gött. Gelehrte Anz.* 1908, pp. 171 ff. (See also *Klio*, VII, 1907, pp. 1 ff.)

Statues of Asclepius in Pergamon. — H. VON FRITZE treats in *Nomisma*, II, 1909, pp. 19–35 (pl.) of three types of statues of Asclepius shown on coins of Pergamon, (1) the Asclepius of Phryomachus, (2) the standing Asclepius on coins of the imperial period, and (3) Asclepius enthroned.

Coins from the Weber Collection. — In *Le Musée*, V, 1908, pp. 300–304 (28 figs.), A. GREEN gives a brief account of some of the most remarkable specimens of Greek coins in the Weber collection which was sold at auction in Munich in November, 1908. Among these an Athenian decadrachm, a Syracusan decadrachm signed by Evaenetos, and a gold double stater of Philip II of Macedonia deserve mention.

Forged Coins. — In *Le Musée*, VI, 1909, pp. 30–42 (2 pls.; 18 figs.), O. THEATES discusses the subject of forged coins, gives the names of well-known forgers and the characteristics of their work, and finally classifies the forgeries and explains the methods by which they may be detected.

GENERAL AND MISCELLANEOUS

The Discoveries in Crete in their Relation to the History of Egypt. — In *S. Bibl. Arch.* XXXI, 1909, pp. 135–148 (3 pls.), H. R. HALL summarizes the results of the discoveries in Crete in the light of our knowledge of Egyptian and Oriental history. Following the scheme of Dr. Evans, he divides the discoveries into three main periods called Early Minoan, Middle Minoan, and Late Minoan, each of which is subdivided into three minor periods. Middle Minoan II was contemporary with the twelfth and thirteenth dynasties in Egypt, while the end of Late Minoan I, the whole of Late Minoan II, and the beginning of Late Minoan III were contemporary with the eighteenth dynasty of Egypt. These synchronisms are certain. The Cretan polychrome pottery of Middle Minoan II, often known as Kamáres ware, has been discovered with objects of the twelfth dynasty at Kahun, and now the decisive discovery has been made of a splendid Kamáres pot in an untouched twelfth dynasty tomb at Abydos. These Egyptian synchronisms make it possible to determine the dates of the Cretan epochs with considerable certainty. Late Minoan I cannot have come to an end before 1600 B.C. Late Minoan III cannot have begun after 1400 B.C. Consequently, Late Minoan II lay between these two outside dates. The great catastrophe which brought the civilization of Crete to a premature end may be dated about 1400 B.C. Middle Minoan II, which is contemporaneous with the twelfth Egyptian dynasty, depends for its date upon our interpretation of the Egyptian chronological evidence. Petrie's date differs from Meyer's by a full Sothic period of 1460 years. It seems impossible to put Middle Minoan II 1500 years earlier than Late Minoan II. Consequently, if we must choose between Petrie and Meyer, the Cretan evidence is decidedly more favorable to Meyer's chronology, but Meyer's date seems a little too late to allow for the entire Cretan development. The archaeological evidence favors the view that the earliest settlers in Crete came from Africa and brought with them a civilization that was identical in its origin with the beginnings of Egyptian civilization.

Creto-Mycenaean Art. — In *Jh. Oest. Arch.* I. XI, 1909, pp. 242–258 (7 figs.), A. REICHEL discusses in some detail the problem of Creto-Myce-

naean art, and concludes that a vigorous native art was influenced to a certain extent by both Egyptian and Babylonian art. The adoption of the Egyptian technique in painting naturally affected Cretan painting, while Babylonian influence made itself felt rather in the sculpture. The Homeric description of the shield of Achilles exhibits the characteristics of Cretomycenaean art and may well be a true picture, but it does not necessarily imply that the poet had ever seen such a shield.

Hittites in Greece?—New readings of cuneiform texts with the names of the Hittite kings of the fourteenth century B.C. show one of the names to be identical with that of Myrtilus, or Myrsilus, the charioteer of Pelops, and seem to put new meaning into the old legends of Amazons and other Asia Minor peoples who came in contact with the Greeks on both sides of the Aegean. Another important discovery is the purely Aryan and Sanscrit character of the names of gods worshipped by a people who adjoined the Hittites on the east and were closely connected with them. This suggests an eastern channel for the entrance of Aryan influences into Asia Minor and Greece, in addition to the northern one by way of Thrace and Phrygia. (H. R. HALL, *J.H.S.* XXIX, 1909, pp. 19-22.)

Early Civilization in Northern Greece.—In *Annals of Archaeology and Anthropology*, I, 1908, pp. 118-134 (pl.; 6 figs.), A. J. B. WACE, J. P. DROOP, and M. S. THOMPSON discuss the early civilization of northern Greece in the light of recent excavations at Zerelia (*A.J.A.* XIII, p. 85) and at other sites. The neolithic mounds date from about 2500 B.C. and earlier; and many of them were abandoned about 2000-1800 B.C., when the degeneration in the painted pottery occurs. The red on white ware, found

in such abundance, has not been discovered at Chaeronea or at Olympia, as has been thought. About 1200-1100 B.C. Mycenaean influence reached the Pagasaeon Gulf, and the neolithic people came in contact with the bronze-age people of the south. The coarse monochrome, bronze-age pottery is due to artistic decay, not to an invasion, as Tsountas thinks. But the bronze-age cist-tombs, which are later than Mycenaean times, probably belong to an invading race from the north. It is much to be desired that neolithic sites in Aetolia and Epirus be explored.



FIGURE 5.—RELIEF FROM PRINIÀ.

The Excavations at Prinià, 1906-08.—In *Boll. Arte*, II, 1908, pp. 441-462 (3 pls.; 16 figs.), L. PERNIER reports at some length upon the

excavations carried on at Prinià, Crete, from 1906 to 1908 (see *A.J.A.* XII, pp. 96 and 362). On the west side of the site is a square fort, 41 m. long on each side, with strong walls 2.30 m. to 2.60 m. thick. There are square towers at the corners, and the entrance is through the southeast tower. Inscriptions dating from the end of the seventh century and the beginning of the

sixth, built into the walls, make it probable that the fort was built in the fifth century B.C. on the site of some earlier structure. It was abandoned in Hellenistic times. The objects found within it were of no great importance. Two limestone grave *stelae* with figures scratched in were built into the walls. One of these represents the lower part of a woman; the other the lower part of a warrior advancing to the left, while a diminutive figure in front of him raises its hands in supplication. Bronze was hardly found at all; but objects of iron were numerous, as were vase fragments. Some of these are archaic, adorned with pre-Hellenic motives, such as spirals and rosettes; others date from the fourth and third centuries. In the middle and eastern part of the acropolis were private houses, in some of which the roofs were supported by columns of wood resting on stone bases. Many fragments of pithoi, with designs pressed in, came to light in this part of the site. Many of them date from the early Greek period, although the decorations are of earlier types, such as spirals, concentric circles, rosettes, the herring-bone pattern, etc. There are two temples placed side by side, but with slightly different orientation. These are very early and are the real successors of the Mycenaean *megara*. The sculptures of temple A were of limestone, painted. Along the east wall were found great pieces of cornice and carved slabs 84 cm. high, representing men on horseback (Fig. 5).

The figures formed a continuous frieze along the east front, which was not provided with columns. They are very crude. The warrior, diminutive as compared with the horse, is nude, but wears a cap, carries a small, round shield, and brandishes a spear. A restoration has been made of the statue of the goddess (Fig. 6). She is seated with her hands on her knees, clothed with a garment reaching to her feet and ornamented below with a band of animals between two bands of rosettes. She has a high headdress and her hair hangs in long curls on her shoulders. The throne on which she sits rests on a base adorned on one side with three lions and on the other with three deer;

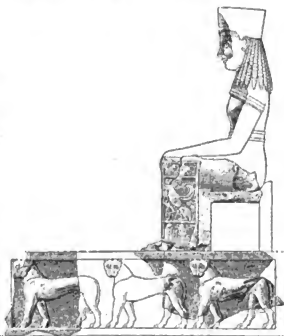


FIGURE 6. — STATUE OF GODDESS, PRINIA.

and this in turn was supported in some way, probably by two columns. A standing figure of the goddess was carved on the under side of the base. These sculptures prove the existence of an early Cretan school of art. The presence of the animals makes it certain that the goddess is Rhea.

The Hecatompodon. — In *Klio*, IX, 1909, pp. 229-247 (fig.), E. PETERSEN replies to G. Körte's criticisms of his views of the Hecatompodon published in his *Burgtempeln der Athenaia*, and discusses some of the conclusions reached by A. Frickenhaus in *Ath. Mitt.* 1908, pp. 17 ff. and 171 ff.

Minor Offerings at Delphi.—In *Klio*, IX, 1909, pp. 153–193 (9 figs.), H. POMTOW and H. BULLE discuss seven of the minor offerings dedicated at Delphi (see *A.J.A.* XI, p. 468; XII, p. 232; XIII, p. 218). 1. Not far from the east end of the Marathon offering and between it and the street stood the tripod of the Athenians. It was dedicated in 330 B.C. and was about 1.75 m. high and stood on a three-stepped base. 2. Near this was the Demades stele (*B.C.H.* XX, p. 677), which, as the letters show, dated from about the same time. 3. The stone bearing the name of Philopoeimen once formed part of the base of the equestrian statue mentioned by Plutarch (*Philopoeimen*, chs. 2 and 10), in which he is represented slaying the tyrant Machanidas. The group must have been erected in 183–182 on the north side of the sacred way near the offering of the Arcadians. The base was 2.5 or 3 m. long, and the inscription was cut on the narrow end. 4. The inscription Δο Αpy he thinks, in opposition to Homolle, had nothing to do with the Wooden Horse, but should be restored Δο[ρόθεος ἱεργάταο] 'Αpy[εῖος]. It dates perhaps from 467 B.C. 5. The base inscribed 'Ργγῖνα probably supported an offering set up to commemorate the overthrow of the tyrants at Rhegium. This stone should probably be joined to the one just mentioned which recorded the name of the artist. The monument seems to have stood near the offering of the Tarentines. 6. The block inscribed with the name of Hiero supported the first of Hiero's offerings at Delphi set up in 482 B.C. There was, however, also at Delphi a statue of Hiero the Spartan, as Plutarch implies, and the inscription found at Olympia (*Olympia*, V, No. 274) probably refers to another statue of him set up there. 7. The statue of Sostratus (*B.C.H.* VI, p. 446) stood near the treasury of the Sicyonians and was erected in 355 B.C.

The Temple of Artemis at Mauriki.—In Πρακτικά for 1907 (published 1908), pp. 120–122, K. A. ROMAIOS describes the temple of Artemis excavated by him at Mauriki in Tegea (*A.J.A.* XII, p. 359). Only one-third of the eastern end of the stylobate is preserved, but it is clear that the temple dated from the end of the sixth century B.C. and probably had six by fourteen columns. It was of marble, in the Doric style, and the capitals of the columns differed in form. Small pieces of a colossal statue, and fragments of terra-cotta figurines, about ten of which surely represent Artemis, were found, as well as quantities of clay animals, especially dogs, and weapons. In the lower strata many small bronzes of the geometric period and geometric vases prove that there must have been an earlier temple on this site.

Notes on Thasos.—In *R. Arch.* XIII, 1909, pp. 1–14 (14 figs.), W. DEONNA publishes notes on the ancient remains on the island of Thasos, to supplement and correct the article by Fredrich in *Ath. Mitt.* 1908, pp. 215 ff. The reliefs of Dionysus and Heracles are found to have decorated the base at the right of the gate. The archaic head (*Ath. Mitt.* p. 247, fig. 7) is not female, but male, an "Apollo," and is assigned to the Chian school.

The Greek Colonies North of the Black Sea.—In *Klio*, IX, 1909, pp. 139–152, E. VON STERN shows the importance of the Greek towns lying north of the Black Sea. Excavations in Kiev, Bessarabia, and Tschernigov prove that in neolithic times the same culture, with some local differences, extended from these regions as far as Thessaly. Excavations on the island of Berezan show three different periods. In the oldest stratum Rhodian and Clazomenian fragments are found, as well as pieces of Fikellura ware;

above these come Ionian cylices, Corinthian sherds, etc.; and higher still are Attic black-figured vases and a few fragments of the severe red-figured style. Tombs opened at Olbia, Panticapaeum, Phanagoria, Gorgippa, and elsewhere also show an Ionic civilization strongly influenced by Athens. The Persian wars interrupted this; but after they were over Attic influence became predominant, as did the Attic dialect. Under Roman supremacy these towns prospered greatly, and they continued to play an important part in the commerce between East and West down to the eleventh century A.D.

The Evidence of the Aeginetan Marbles as to the Drawing of the Bow.—In *Z. Ethn.* XL, 1908, pp. 845-856, M. BUCHNER discusses three or four positions of the right hand in drawing back string and arrow preparatory to shooting with the bow, and concludes on the evidence of the Aeginetan sculptures that among Greek archers, in a way which most closely resembles the habit of the Turks and Chinese of a few decades ago, the string was caught in the joint of the thumb, and that this was held firm by resting the end of the middle finger on the nail of the thumb. The stiffness of anything but a toy bow seems to make this necessary, so much so that the Chinese method was to reinforce the strength of the thumb by holding both index and middle finger thus placed, and to prevent the string from cutting into the flesh by the use of a ring on the thumb. The latter part of the article treats somewhat more briefly of the Chinese method of stringing the bow, and uses this to elucidate the vase painting of a man stringing a bow in *K. B. Ak. d. W.* 1906, p. 299. The bow, which is passed behind the right leg, with one end resting on the left knee while the other is held in the right hand, is pressed down in the middle by the leg until the string passing in front of the leg can be fastened in its notch. This Oriental influence may have come from China through the Tartars and Scythians.

The Winged Artemis.—At a meeting of the British School at Athens, March 19, 1909, M. S. THOMPSON showed that a large number of figures of the winged Artemis, with several new variants, were found at the temple of Artemis Orthia at Sparta. These prove that the type was known on the mainland of Greece as early as the geometric period, and the writer argued that it was, therefore, Peloponnesian rather than Ionian. The goddess without wings, but accompanied by her animals, is found in Minoan art. The wings are probably due to Oriental influence. (*Athen.* April 10, 1909, p. 445.)

Cybele.—Under the title *Cybécé, Étude sur les transformations plastiques d'un type divin* (Bordeaux, 1909, Feret et Fils, 131 pp.; 5 pls.; 77 figs.), G. RADET discusses the goddess Cybele and the Artemisium at Sardis. The first part of this study was printed in *R. Ét. Anc.* X, pp. 109-160 (*A.J.A.* XII, pp. 358 ff.), and portions of the second part in *C. R. Acad. Insc.* 1906, p. 282, and 1908, p. 221.

The Rape of Persephone.—In *Arch. Rel.* XII, 1909, pp. 285-312, L. MALTEZ argues that the scene of the rape of Persephone was originally located in the Mysian plain in Argolis; and that by the sixth century B.C. the legend had been transferred to Eleusis.

Ancient Birth Customs.—The Greek and Roman custom of laying a new-born infant upon the ground (not on a floor) and of laying the dying upon the ground, and the custom among other nations of laying a woman in childbirth on the ground, are all illustrations of the early belief that life has its origin in the earth and must return to the same element. Among

the Greeks and Romans, the kneeling position of a woman in labor was a form of the same tradition. (E. SAMTER, *Arch. Anz.* 1908, cols. 522-524.)

The Ancient Attic Calendar. — In 'Εφ. 'Αρχ. 1908, pp. 283-314, K. MALTEZOS concludes his article (cf. 'Εφ. 'Αρχ. 1907, pp. 239 ff. and 1908, pp. 143 ff.; *A.J.A.* XII, p. 467) on the date of the application of Meton's nineteen-year cycle to the Attic political calendar. After an exhaustive examination of the epigraphic and other evidence and the construction of various trial calendars, he concludes that the Meton cycle was adopted in 422-1 B.C., the eight-year cycle, in 582 B.C., and that up to 582 a two-year cycle was in vogue. On the basis of these conclusions, he revises (pp. 315-318) the restorations of two Attic decrees, 'Εφ. 'Αρχ. 1898, p. 7, and 1901, p. 51, respectively.

Expediitio Alexandri, Lib. V. — An Austrian military expert, Captain Veith, has demonstrated that Arrian's account of the battle at the Hydaspes, to which exception has been taken on military and historical grounds, is entirely consistent and correct. (R. OEHLER, *Arch. Anz.* 1908, col. 522.)

The Ancient Greek Historians. — In his Lane Lectures, delivered at Harvard University in the spring of 1908, Professor Bury discussed the works of the Ancient Greek Historians, beginning with the Homeric poems and ending with a discussion of the influence of Greek on Roman historiography and the views of the ancients on the use of history. While the book contains little or no strictly archaeological material, the illuminating discussion of the works and the mental attitudes of the Greek historians is of value to archaeologists as to all students of antiquity. (*The Ancient Greek Historians*, by J. B. Bury. New York, 1909, The Macmillan Co. x, 281 pp. 8vo. \$2.25.)

Greek Athletics. — In his *Philostratos über Gymnastik* (Leipzig, 1909, Teubner. vi, 336 pp. 8vo. M. 10), JULIUS JÜTHNER collects and examines the extant material relating to Greek athletics. He discusses the history of the terms *γυμναστής* and *παιδοτρέβης*; the noted trainers and teachers of athletics, such as Iccus, Herodicus, and Diotimus; the writers on gymnastic training, like Theon; the fragments of unknown *παιδοτρέβαι*; the place of athletics in the works of medical writers and philosophers; and the writers *περὶ ἀγώνων*. The second part of the book contains a careful introduction to the *περὶ γυμναστικῆς* of Philostratus, followed by a critical edition of the text, a translation and full commentary.

The Whipping of Slaves in Greece. — In *C. R. Acad. Insc.* 1908, pp. 571-587, G. GLOTZ discusses at some length whipping as a punishment for slaves in Greece, and shows that at Athens the number of blows inflicted on a slave for an offence was equal to the number of drachmas fine for the free man; that the number of blows must be proportional to the crime, and police magistrates could not inflict more than fifty blows. In the punishment of slaves Attic law was humane as compared with the laws of the rest of Greece. In Athens the slave had certain legal rights.

The Prices of Meat in Antiquity. — In *R. Stor. Ant.* XII, 1908, pp. 306-325, C. BARBAGALLO concludes his discussion of the prices of meat in antiquity (see *A.J.A.* XIII, p. 188). In the present section he investigates the cost of bulls, cows, pigs, sheep, etc., in Cos, Attica, Phocis (Delphi), Arcadia (Tegea), Thessaly, Phrygia, and Sicily. His conclusions are as follows: in Attica in the sixth century and Sicily in the fifth century B.C. the cost of beef

was about five francs per head or twenty-five centimes per centigram. An average price of beef in the fifth and fourth centuries B.C. was fifty-five to sixty-five francs per head or thirty to thirty-five centimes per centigram. At Athens in the fourth century and at Delos in the third and second centuries B.C. the price of a pig was about three francs and that of a young pig from nine to ten francs, or six and twenty centimes per centigram. Lamb and goats'-meat were considerably cheaper, a sheep or goat in Attica of the fourth century bringing only about ninety-five centimes. At Delos and Cos prices were higher.

Greece in 1810-1817.—A collection of about 500 drawings and sketches made in Greece and Greek lands by Mr. C. R. Cockerell in the years 1810-1817 is now owned by the British Museum. The subjects cover all parts of Greece and many of the important sites, besides Constantinople and parts of Asia Minor. A large number of them are naturally of archaeological interest, especially those of Aegina and Bassae, where excavations were going on at the time. The collection is briefly described by C. A. HUTTON in *J.H.S.* XXIX, 1909, pp. 53-59 (pl.).

Ancient Rings.—In *Le Musée*, VI, 1909, pp. 3-17 (21 figs.), 91-98 (12 figs.), 107-112 (9 figs.), A. SAMBON discusses the subject of ancient rings. The oldest rings known are of ivory and come from the prehistoric cemeteries of Negadah and Diospolis in Egypt. The oldest seal ring consists of a scarab with a piece of gold wire run through it and the ends connected. Such rings were common in Egypt in the eleventh and twelfth dynasties. In Greece there are the Mycenaean rings, and rings of geometric designs dating from the tenth to the eighth centuries. In the sixth and fifth centuries B.C. Greek rings were light and in good taste; but in the fourth and third centuries they became larger and ostentatious. The Etruscan rings were heavy and often made use of a scarab. The oldest Roman rings were imitations of Etruscan, but they soon followed Hellenistic models. The commonest form of ring found at Pompeii is in the form of a serpent. The rings in use in southern Italy from the third to the first century came chiefly from Syria and Egypt. In Roman Imperial times seals cut out of onyx in such a way that the figure was of a different color from the background were common. In the third and fourth centuries A.D. many strange and complicated motives were introduced. Sometimes a gold coin was set as the seal, and at this time inscriptions were common. The third article treats of the superstitions attached to different stones and of the abraxas gems.

Archaeological Studies.—The publishing of a series of studies to which his students should contribute was one of the projects of the late Professor Furtwängler. Since his death a volume dedicated to his memory has appeared containing four monographs by former pupils. In pp. 1-106 (3 pls.; 6 figs.) R. HACKL discusses the mercantile inscriptions on Attic vases and records 612 examples. In pp. 107-248 (26 figs.) A. HEKLER discusses and classifies the draped female statues of the Romans. He divides them into fifty-one different types, all of which may be traced back to one of three original types, that of the fifth century, of the fourth century, or of the Hellenistic period. In *Jh. Ost. Arch. I.* Beiblatt, XI, 1909, cols. 195-198, he changes his opinion of the date of Figure 9 from the fifth to the fourth century. In pp. 249-397 (58 figs.) EDUARD SCHMIDT dis-

cusses the archaic running figures which have one knee on the ground. In pp. 399-504 (33 figs.) G. LIPPOLD examines in turn the Mycenaean shield, the Boeotian shield, the round shield, the epic shield, and the shield in late Greek times. (*Münchener Archäologische Studien dem Andenken Adolf Furtwänglers Gewidmet.* München, 1909, Beck. viii, 504 pp.; 3 pls.; 123 figs. 4to. M. 25.)

The Greek Terra-cottas in Constantinople.—The Imperial Ottoman Museum in Constantinople has made a valuable addition to the material available for the study of Greek terra-cotta figurines in publishing a detailed catalogue of its collection. Three thousand five hundred and fifty-four terra-cottas in all are described, arranged according to the place where they were found in chronological order. There are specimens from Rhodes, Cos, Chalce, Nisyros, Lesbos, the Troad and Mysia, Bithynia and Pontus, Ephesus, Notium, Smyrna, Priene, Myrina, Cyme, and a few other parts of Asia Minor, Chalcidice, Tripolis, Greece, Magna Graecia, Palestine and Mesopotamia, and from unknown sites. (*Catalogue des figurines grecques de terre cuite.* Par ordre du ministère impérial de l'instruction publique. Constantinople, 1908, Ahmed Ihsan. ix, 663 pp.; 15 pls. 8vo. 15 fr.)

ITALY

ARCHITECTURE

Prehistoric Buildings in Sardinia.—At an open meeting of the British School at Rome, March 12, 1909, D. Mackenzie read a paper on his explorations in Sardinia during the past season (see *A.J.A.* XII, pp. 470-471). He discussed especially the *nuraghe* of Voes, a massive triangular building, strongly fortified, with the entrance on the south side. On the ground floor are four circular chambers with beehive roofs. One of these is in the centre and the other three within the angles of the triangle, which have rounded external contours. One enters through the portal upon a small open court having a doorway at each side leading to the rooms at the base of the triangle, and another doorway in front by which the central chamber is reached. At the left of the entrance is a stairway and at the right a niche for the guardian. The most remarkable feature of the structure is the existence of two long curving corridors in the thickness of the wall of two sides of the triangle, probably places of refuge. Above them were other similar corridors. This *nuraghe* must have been erected at one time on a definite plan, but others were simpler buildings enlarged from time to time. The *nuraghe* of Nossia, near Paulilatino, lay in the centre of a contemporary village of round huts and may have been the citadel of an independent village instead of the residence of a chief. Ten remarkable monuments of the dolmen class were also found in different parts of the island illustrating the successive phases of transformation from dolmen to "Giant's Tomb." (*Athen.* March 27, 1909, pp. 383-384.) In *Mon. Ant.* XIX, cols. 225-303 (6 pls.; 20 figs.), A. TARAMELLI shows that the *nuraghe* of Palmavera was a dwelling adapted for strong defence. It belongs to two periods, the oldest parts dating from about 1500 B.C. The site was probably abandoned about 700 B.C. Various objects found show analogies with neolithic and bronze-age civilization in southern France, Spain, Sicily, Crete, and the Aegean; but in general the development was indigenous.

The Giants' Tombs of Sardinia.—In *Memnon*, II, 1908, pp. 180-210 (27 figs.), D. MACKENZIE describes the Giants' Tombs at Ottosoddis, Serra Tsargiu, Su Angiu, Sena, Sella Fontana Binu, Sa Nugi, San Giovanni and San Cosino; and the *nuraghe* at Melas. He believes with Nissardi that the *nuraghi* were either village castles, or forts commanding plains or valleys and so situated as to be capable of communication with other *nuraghi*. The Giants' Tombs were the burial places of the inhabitants of these structures. He discusses a number of tombs in France, Spain, and Great Britain, in which he finds analogies with the Tombs of the Giants.

The Measurements of the Temple of Hercules at Cori.—The results of his measurements of the "Temple of Hercules" at Cori are published by G. GIOVANNONI in *Röm. Mitt.* XXIII, 1908, pp. 109-130 (2 pls.; 5 figs.). These were first announced by W. H. GOODYEAR in *A.J.A.* XI, 1907, pp. 160 ff. It will be recalled that the most striking feature of this temple is the concave curvature (in plan) of the façade.

Trajan's Column.—In *Trajan's Column* (reprinted from *Proceedings of the British Academy*, Vol. III, London, 1909, Froude. 6 pp.; 2 pls. 1 s.), G. BONI explains his discovery of a chamber in the base of Trajan's column with marks on the wall showing where the urns of Trajan and Plotina had stood, and shows that there had never been a hill at that spot (see *A.J.A.* XII, pp. 100 and 474). The inscription on the column *ad declarandum quantae altitudinis mons et locus tantis operibus sit egestus* he translates, "In order to make visible (i.e. from the summit of the column, one hundred feet above the sepulchre of Trajan) how much in elevation the hill (slope of Quirinal) and the site (of the Forum Ulpium) had been raised up by such noble works of art."

SCULPTURE

The Group of the Muses from Hadrian's Villa. In *R. Arch.* XII, 1908, pp. 359-363 (pl.), P. G. HÜBNER traces the history of the group of Muses now at Madrid and establishes its identity with eight statues found about 1500 in Hadrian's villa at Tivoli. The ninth Muse, mentioned by Ligorio (Clarac, p. 267, 2, Reinach), was never in Madrid, but is on the stairway of the Palazzo dei Conservatori, in Rome.

A Faun with an Amphora.—In *Le Musée*, V, 1908, pp. 279-284 (pl.), N. DE ROMÉ publishes a statuette 17.7 cm. high in the Metropolitan Museum in New York representing a faun with an amphora under his arm. The work is Roman and may be compared with the sculptures found in Hadrian's villa at Tivoli, but it was probably inspired by Greek work. The faun appears to be just starting off.

The Capitoline Wolf.—In *Klio*, IX, 1909, pp. 29-47 (2 figs.), E. PETERSEN continues his discussion of the Capitoline wolf (*A.J.A.* XIII, p. 222), and shows that it owes its origin to Ionic art. It was probably dedicated to Jupiter immediately after the overthrow of the kings and became well known as a symbol of the Roman republic towards the end of the fourth century B.C. through its appearance on coins. At first the children had no names, but as time went on they became more and more closely connected with the story of the founding of Rome. The legend is probably not Greek, although the idea of children being exposed and being suckled by a wild animal is common in Greek mythology. In *Arch. Rel.* XII, 1909, pp.

101-125, W. SOLTAU argues that the Romulus legend was not a Roman folk story, but owes its origin to the *Tyro* of Sophocles, through the *Almonia Remi et Romuli* of Naevius. The story of the suckling wolf, he thinks, came from a Greek source. The statue of the wolf stood originally alone and the infants were added at a later date.

Animals in Roman Sculpture.—In *Le Musée*, VI, 1909, pp. 74-77 (4 figs.), A. SAMBON argues that the idea of introducing animals and landscapes into Roman sculpture came from Alexandria.

The Roman Bust from Vienne.—In *B. Soc. Ant. Fr.* 1908, pp. 308-310, A. HÉRON DE VILLEFOSSE shows that the bust found at Vienne in 1908 and supposed to be a portrait of Nero is really much later. The style proves it to be later than Constantine. He argues with E. Bizot that it probably represents the emperor Magnentius.

The Technique of Glass Busts.—By a series of experiments K. BONZ has proved that such glass busts as are represented by a specimen in the Conservatori Museum at Rome, and another at Strassburg, were produced by modelling while cold, and then firing. The possibility of this process has been hitherto denied. Strictly speaking, such a method has to do with enamel, rather than with glass. (*Röm. Mitt.* XXIII, 1908, pp. 145-152.)

Two Roman Bronzes in Hungary.—In *Jh. Oest. Arch. I.* XI, 1909, pp. 236-241 (2 figs.), A. HEKLER publishes a bronze statuette 12 cm. high in the National Museum at Budapest. It is a Roman work, but reproduces a fifth century type created by Polyclitus. It represents a nude, heavily built Hermes holding a tortoise in his extended right hand and in his left, which hangs by his side, a roll of writing. There are traces of wings on the head. In Alexandrian times Hermes was identified with Thoth; hence the roll. The Hermes in Regensburg is the only other example known with this attribute. A statuette of a youthful Apollo in the museum at Vespérin is also published. The god holds a patera in his extended right hand, wears the quiver strapped on his back, and held in his left hand an object now lost. The writer argues that this was a dolphin.

VASES

Early Apulian Pottery.—His study of Apulian pottery before the coming of the Greeks is completed by M. MAYER in *Röm. Mitt.* XXIII, 1908, pp. 167-262 (12 pls.; 9 figs.).

INSCRIPTIONS

A Picene Inscription in Rome.—In *Rend. Acc. Lincei*, XVII, 1909, pp. 681-694 (fig.), L. MARIANI publishes a Picene grave stele said to have been found at Fano and recently acquired by the Kircherian Museum in Rome. It is 59 cm. high, 62 cm. wide, and 9 cm. thick, and is slightly broken at the right. On one side is an inscription which he transliterates thus:

Pa . katicot
ke koteri
amvet : nk
.... k . . . i

A line of connecting spirals serves as a border on the left side, and above, except in the middle, where there is a five-spoked wheel. On the back of the stone are primitive drawings arranged in three rows. In the top row at the right is a ship, and at the left a man, perhaps in the act of jumping into a river. In the middle row is a battle scene; and in the bottom row a lion approaching a man who is perhaps hunting. The drawings may be intended to represent events in the life of the deceased.

The Statue Base of C. Sempronius Tuditanus.—In *Jh. Oest. Arch. I.* XI, 1909, pp. 276–297 (4 figs.), E. REISCH discusses the inscription on the statue base of C. Sempronius Tuditanus published by A. von Premerstein (*ibid.* X, pp. 264–282; see *A.J.A.* XIII, p. 223) and shown by Buecheler (*Rh. Mus.* LXIII, pp. 321 f.) to be written in Saturnian verse. He restores it with the help of Pliny as follows:

[C. Sempronius C. f. Tuditanus imperator de manubiis]
 [Iapodas]
 Ab Aquileia ad Titium flumen stadia mille
 [. profligavit]
 [. domuit Histros]
 [Ex itin]re et Tauriscos c[on]trivit et Carnos]
 [in montib]us coactos m[.]
 [diebus te]r quineis qua[ter] hostes super]avit
 [fauste]is signeis consi[lieis Semproni]os Tuditanus.
 [ita Roma]e egit triumphu[m, pra]idam heic] dedit Timavo,
 [sacra pa]tria ei restituit atque magist]reis tradit.

In *Arch. Anz.* 1908, col. 512, H. DESSAU points out that this is the latest example of the use of Saturnian metre for triumphal inscriptions. Only one other such is known in the original, that in which Mummius, the destroyer of Corinth, dedicated a temple to Hercules at Rome in 146 B.C.

A Military Diploma.—In *C. R. Acad. Insc.* 1909, pp. 130–134 (2 figs.), M. M. VASSIERS publishes a military diploma found a few years ago at Tricorium and now in the museum at Belgrade. It is engraved on both sides of a bronze plate 15.8 cm. by 14 cm. and is dated June 29, 120 A.D. This inscription proves that Hadrian held the *tribunicia potestas* for the fourth time in 120.

Viana.—In *Röm.-Germ. Korrespondenzblatt*, II, 1909, pp. 11–12, F. HAUG shows that Viana of the military diplomas is identical with Vienna, modern Vienne, not with Rhaetian Viana.

Latin Inscriptions in Baltimore.—In the *American Journal of Philology*, XXX, 1909, pp. 61–71 and 153–170, H. L. WILSON publishes twenty-one Latin inscriptions at Johns Hopkins University, Baltimore. Some of them had been previously published, but the writer is able to make important corrections and additions. Three have to do with *jura sepulcrorum*, and one (No. 10) records the name of a hitherto unknown granary at Rome, the *Horrea Faeniana*.

Three Inscribed Roman Tiles.—In *Hermes*, XLIV, 1909, pp. 152–154, G. TÉGLÁS discusses two stamped tiles in the private collection of Count Dominik Teleky at Gernyeszeg. They read LEGVD and LEGVD; that is, *Leg(io) V D(acica)*. This proves that when in 167–8 A.D. the *Legio V Macedonica* was ordered from lower Moesia to Dacia it adopted the name *Dacica*, a

title which it dropped upon its withdrawal to Oescus in Moesia a hundred years later. Another tile, in the collection of S. Téglás in Torda, reads VEX· D· P; that is, *Vex(illatio) D(acorum) P(arthica)*.

A Sepulchral Inscription. — In *Mél. Arch. Hist.* XXVIII, 1908, pp. 341-344, A. PIGANIOL describes a stele, found at Tebesa in Numidia, with the sepulchral inscription of a certain Sextus Sulpicius Senilis, a *beneficiarius* of the imperial legates Tettius Iulianus and Iavolenus Priscus. This inscription adds the name of the former to the list of the governors of Numidia, and seems to prove that he handed the province over to his successor between July, 82 A.D. and May, 83 A.D.

Irrigation at Lamasba. — In *Mél. Arch. Hist.* XXVIII, 1908, pp. 373-405, F. G. DE PACHTREE discusses exhaustively an inscription (*C.I.L.* VIII, 4440), fragments of which were found in 1877 in Algeria, containing regulations in force concerning irrigation in the Roman city of Lamasba. Some corrections are made in the readings already published, and the whole system employed is described as completely as possible.

Corrections of Inscriptions. — In *Cl. Phil.* IV, 1909, pp. 190-198, B. L. VELMAN from a Vatican manuscript corrects twelve inscriptions in *C.I.L.* VI and XI, and adds two hitherto unpublished ones.

Hebrew Epitaphs in Rome. — Certain Hebrew inscriptions at S. Paolo fuori le mura are examined by V. CASTIGLIONI in *B. Com. Rom.* XXXVI, 1908, pp. 77-85. They are from the very ancient Jewish cemetery on the Via Portuensis, rediscovered in 1904.

Epigraphic Bulletin. — In *R. Arch.* XII, 1908, pp. 441-487, R. CAGNAT and M. BESNIER, in their review of epigraphical publications (July-December, 1908) relating to Roman antiquity, give the text of 133 inscriptions, notes on publications relating to epigraphy, and (pp. 475-487) full indices.

COINS

Early Italian Coinage Systems. — An article on the metrological bases of the earliest monetary system of central Italy contributed by E. J. HAEBERLIN to *Boll. Num.* VI, pp. 141-144, 157-162, is on the line of his article on the same subject in the *Z. Num.* XXVII, 1908 (see *A.J.A.* XIII, p. 224). Notes by SER. RICCI are appended.

Plated and Dentellate Roman Coins. — G. DATTARI argues that plated coins in the proportion of one to seven of pure metal were issued merely to secure to the government its proper return (10%) for the expense of striking coins. Dentellate coins were designed to discourage counterfeiters, through the difficulty of imitating their outline in rude moulds. (*Boll. Num.* VII, pp. 33-38.)

Roman Contorniates and Medallions. — A contribution to a corpus of Roman contorniates is made by GEORGE MACDONALD in describing minutely the eighty-five specimens in Dr. William Hunter's collection. (*Num. Chron.* 1909, pp. 19-53; 3 pl.) To the same paper is added a description of five medallions accidentally omitted from the author's catalogue of Dr. Hunter's collection in *Num. Chron.* 1906, pp. 93 ff. The medallion of Diadumenianus there described (*l.c.* p. 109) the author now fears may be spurious.

Bronze Coinage of Antony's Prefects of the Fleet. — In *Riv. Ital. Num.* XXI, 1908, pp. 537-559, G. DATTARI argues that the letters ABΓΔΣ found

on coins of Antony's prefects of the fleet serve merely to indicate separate mints, as if by number (1-4, 6), the fifth (E) not occurring, perhaps because it coined only silver (or possibly also gold). An analytic table of all known coins of this series accompanies the article.

Debasement of Coinage in Imperial Rome.—FR. GNECCHI, in the ninetyeth instalment of his 'Appunti di Numismatica Romana' (*Riv. Ital. Num.* XXI, 1908, pp. 520-536), rejects the belief hitherto held that the imperial debasement of the silver coinage was due to the lack of conscience on the part of the supreme rulers, and argues that it is to be explained rather by the rise in the value of silver as compared with copper. Imperial and senatorial mints were kept in constant accord and harmony, and the only way to maintain the normal relation of value between the silver coinage and that in the baser metals was to increase the weight of the latter coins, or to reduce the standard of metal in the former. The first expedient was impracticable; the second was therefore the necessary resort.

Countermarks of Claudius.—Countermarks of Claudius I on various Greek and Roman coins are discussed by R. K. MOWAT in *Num. Chron.* 1909, pp. 10-18 (pl.), who would consider such coins a sort of preface to the proper Claudian coinage, stamped during the early days of his reign.

The Constantinian Siliqua.—An interesting discussion of the Constantinian *siliqua* is summarized in *Monatsblatt der Numismatischen Gesellschaft in Wien*, VIII, pp. 36-38.

Local Bronze Coins in Roman Africa.—In *Klio*, IX, 1909, pp. 194-205 R. CAGNAT shows that the issuing of municipal bronze coins in Africa under the sanction of Rome ceased with the end of the reign of Tiberius everywhere except in Mauretania Tingitana and at the town of Babba. No others were issued, except those struck by Clodius Macer, the rival of Galba, down to the time of the tetrarchy. Excavations, however, in many places prove that there was an abundance of old Carthaginian and Numidian coins which must have had a local circulation. These obsolete coins took the place of the bronze pieces struck for local circulation in parts of Asia. The reason for their existence as a medium of exchange was the difficulty and expense of transporting a heavy mass of small coins from Rome.

The Mints of Carthage and Cyzicus.—In *B. Soc. Ant. Fr.* 1908, pp. 205-206, J. MAURICE points out that the Roman coins stamped SMK were struck by the mint at Cyzicus, not by that at Carthage. The latter was closed in 311 A.D. It was reopened by the Vandals, but did not become a mint of the empire until the time of Justin I, who ascended the throne in 518. The coins of Carthage were designated by one of four letters A, B, Γ, or Δ, or by PK (*percutsa Carthagine*). Under the Vandals and Byzantines they bore the letters CAR or KAR or KART. SMK stands for *Sacrum Moneta Kyzici*.

Mint of Serdica.—JULES MAURICE continues in *R. Belge Num.* 1909, pp. 5-17, 130-142 (2 pl.), his chronological classification of the coins struck at the mint of Serdica, 305-311 A.D.

Coinage of Tarentum and Metapontum.—Lieutenant AURELIO BELLENI describes and discusses in *Boll. Num.* VII, pp. 65-69 (2 figs.), a find made at Tarentum in 1908 of 114 silver coins of Tarentum, Metapontum, and Carthage, dating from the period of Hannibal's occupation (212-209 B.C.). He argues that at that time both Italian cities adopted

a Corinthian drachma-standard of 3.71 grammes, thus bringing their coinage into agreement with that of their Carthagiinian deliverer.

Coinage of Terina.—In *Nomisma*, I, 1908, pp. 14–22 (pl.), H. von FRITZE and H. GAEBLER examine critically the monograph of K. Regling on the coins of Terina (66th *Winckelmannsprog. d. arch. Gesellsch. zu Berlin*), and controvert certain of his conclusions.

GENERAL AND MISCELLANEOUS

The Disputed Flints of Breonio Veronese.—In *Annals of Archaeology and Anthropology*, I, pp. 83–95 (pl.; 3 figs.), T. E. PEET discusses the flints found at Breonio near Verona and concludes that, although forged flints are being made to-day near Verona, all those of unusual shape need not be regarded as spurious. They were perhaps made by palaeolithic man after the arrival of neolithic man and, therefore, show neolithic influence.

Medicinal Springs in the Bronze Age.—The use of medicinal springs in the Bronze Age is discussed by L. PROKINI in *B. Pal. It.* IV, 1908, pp. 169–191 (pl.; 10 figs.), with special reference to the discoveries made in 1902 at Panighini, in the province of Forlì. See also *Rend. Acc. Lincei*, XVII, 1908, pp. 671–673.

The Date of the Servian Wall at Rome.—Careful measurements of the stones in all the existing remains of the Servian wall show that two different units were used in cutting the blocks: the Oscan foot of .275 m.; and the Roman foot of .296 m. These indicate two building periods separated by a partial destruction, which was undoubtedly due to the invasion of the Gauls in 390 B.C.; and the earlier wall may really belong to the kingly period, as tradition says. The sherds and other objects found beneath the wall do not indicate a date earlier than about 600 B.C. That burials of the fourth century are found within the line of the wall is no proof of a later origin, as exceptions to the law against intramural burials are recorded in several instances, down to the time of Cicero. (P. GRAEF-FUNDEN, *Arch. Anz.* 1908, cols. 442–444.)

Porta Triumphalis and Via Triumphalis.—An elaborate discussion of the uses of the term *Porta Triumphalis* and *Via Triumphalis* by L. MORRURGO appears in *B. Com. Rom.* XXXVI, 1908, pp. 109–150 (6 figs.). The conclusions are that there was no fixed route for a triumphal procession, though it usually reached the city by way of either the *Campus Martius* or the *Porta Capena*; that a city-gate, or an aqueduct arch, or a temporary arch for the occasion, would be styled *Porta Triumphalis*; that the route of the particular *triumphator* in question was for the time *Via Triumphalis*.

The Via Triumphalis in the Campus Martius.—In *Arch. Rel.* XII, 1909, pp. 67–82 (plan; fig.), A. von DOMASZEWSKI discusses the buildings on the *Via Triumphalis* in the *Campus Martius*. He thinks the relief in the Louvre representing a *lustratio* affords sufficient evidence for identifying the founder of the temple of Neptune. The warrior in this relief is to be identified as Mars, the man bearing the standard as the second censor; the scene at the left represents the taking of the census. The date of this monument is before the time of Marius. He argues that the temple must have been erected in return for a victory obtained by the help of Neptune, and by a man who had been censor. Domitius, the censor of 115 B.C., fulfils

these conditions and was, therefore, the builder of the temple. His descendant Domitius, consul in the year 32, probably repaired the temple and dedicated in it works of Scopas taken from the temple of Poseidon in Byzantium. Another *lustratio* on the occasion of the taking of the census is represented on the arch of Segusio.

The Trophies of Marius in the Forum.—In *Mél. Arch. Hist.* XXVIII, 1908, pp. 353–361, R. LAURENT-VIBERT attempts to prove that the *Marianum scutum Cimbricum sub Novis* of Cicero (*de. Orat.* II, 266) belonged to the trophies with which Marius commemorated his victory over the Cimbri in 101 B.C., and that these trophies were set up originally on the north side of the Forum. After having been pulled down by Sulla, they were removed by Caesar during his aedileship to the Capitoline.

The Fons Furrinae.—In *Mél. Arch. Hist.* XXVIII, 1908, pp. 283–336, P. GAUCKLER supplements his paper in *B. Com. Rom.* 1907, pp. 45–81, with an elaborate description of the remains of what he believes to have been the *fons Furrinae* at the bottom of the ravine in the villa Sciarra where the *lucus Furrinae* is now located, and he defends his view against the criticism of Huelsen in *Röm. Mitt.* 1907, pp. 225–254. This fountain Gauckler identifies with the Furrinae *νύμφαι* of several imperial inscriptions, and he believes that it furnished water for a temple of certain Syrian divinities. Remains of this temple he thinks have been discovered near by (see *A.J.A.* XIII, pp. 361 f.).

The Topography of the Vatican Hill.—Studies on the topography of the Vatican Hill by G. TOMASSETTI appear in *B. Com. Rom.* XXXVI, 1908, pp. 21–41 (fig.), with special reference to the links of connection between the classical and the mediaeval.

The Aqueducts of Rome.—In *Jb. Kl. Alt.* XXIII, 1909, pp. 246–260 (21 figs.; plan), T. ASHBY summarizes the results of his study of the aqueducts of Rome.

The Circus and the Amphitheatre in Roman Art.—In *Le Musée*, VI, 1909, pp. 82–90 (2 pls.; 9 figs.), O. THÉÂTÈS gives a brief account of the popular representations of chariot races and gladiatorial combats among the Romans, especially on lamps.

Roman Decorative Art.—In *Le Musée*, VI, 1909, pp. 62–73 (10 figs.), J. DE FOVILLE discusses Roman decorative art and shows its connection with mediaeval art.

A Round Altar at Bologna.—An altar from Bagnacavallo, near Ravenna, now in the Museo Civico of Bologna, forms the subject of a study by P. DUCATI in *Röm. Mitt.* XXIII, 1908, pp. 131–144 (fig.). Round in form, it has two crossed cornucopias, and in its general style recalls the reliefs of the Ara Pacis.

Note on the Walls of Epipolae.—In a discussion of the operations of the Sicilian Expedition in 414 B.C., H. AWDRY reaches conclusions different from those of Bury and Freeman and the commonly accepted view, and following more closely Grote's suggestions. His points are, briefly, that Gylippus's counter-wall was planned to strike the north cliff, not the fort of Euryelus, and that it was not carried much beyond the point where it crossed the line of the Athenian cross-wall, having then accomplished its purpose; that the *ἐγκύρσιον τείχος* was the Athenian cross-wall; that the plateau had several *προβάσεις*, not the one at Euryelus only; although the south

cliff, now so easily climbed at any point, has been entirely changed since the fifth century by the débris of Dionysius's city drifting over its edge; that the *προτειχίσματα* were either detached forts near the new city wall, or projections from it; and that Labdalum was considerably farther to the east than has been supposed. (*J.H.S.* XXIX, 1909, pp. 70-78; 2 plans; 2 figs.)

The Temples at Paestum. — TH. KLUGE, in *Cl. Phil.* IV, 1909, pp. 57-75, attempts to assign to their proper divinities the temples at Paestum. His arguments are drawn especially from coins and from study of orientation, and his conclusions are: (1) the temple of Neptune (or, better, Poseidon) is correctly identified; (2) the so-called 'Basilica' is a temple of Demeter and Kore; (3) the third Greek temple was sacred to Athena; (4) the Roman temple to Jupiter.

Pompeii. — The second edition of Professor Mau's *Pompeji in Leben und Kunst* is practically the German version of the English edition published by Professor Kelsey. There are, however, a few changes in the text, a new chapter on the temple of *Venus Pompeiana*, and twelve additional illustrations. The preface is dated October 18, 1900. (*Pompeji in Leben und Kunst*, von August Mau. Leipzig, 1908, Engelmann. xxii, 564 pp.; 14 pls.; 304 figs.; plan. 8vo. M. 17.)

The Excavations in the Valley of the Sarno. — In *Rend. Acc. Lincei*, XVII, 1908, pp. 459-482, E. PAIS discusses the excavations made in the Sarno valley in 1903. Extensive regions were found which had been planted with piles, probably for agricultural purposes; these are not remains of oak forests, as Patroni and von Duhn maintained. Pais saw traces of a destructive eruption of Vesuvius long before that of 79 A.D. and shortly after the arrival of the Greek colonists.

Rank and Promotion in the Roman Army. — An elaborate monograph on rank and promotion in the Roman army, — practically a treatise on the whole military organization, — by A. VON DOMASZEWSKI, is published in *Bonn. Jb.* 117, 1908, pp. 1-278, with an appendix of epigraphic material.

Social Life in Rome. — In his *Social Life in Rome in the Age of Cicero* (New York, 1909, The Macmillan Company. xv, 362 pp.; map; 4 figs. \$2.25), W. WARDE FOWLER gives a clear and vivid picture of life in Rome in the time of Cicero, based largely on Cicero's letters. He discusses the topography of the city; the lower classes of society; the business men and their methods, investments, etc.; the aristocracy; marriage; education; the slave population and its problems; the rich man's house in town and country; the life of the well-to-do; the holidays and public amusements; and, finally, the religion. The book is a complete account of Roman life for the period of which it treats.

Roman Lanterns. — In *B. Soc. Ant. Fr.* 1908, pp. 224-226, A. HÉRON DE VILLEFOSSE examines the statement that only three or four Roman lanterns have come down to modern times, and finds that at least twenty-seven are known. Besides the one found by him at Ain-el-Hout, Algeria, there are three at Pompeii, twenty-one in the museum at Naples, one in Berlin, and one in Copenhagen.

Roman Terrets. — In *B. Soc. Ant. Fr.* 1909, pp. 143-145, A. HÉRON DE VILLEFOSSE adds one more to the list of bronze objects, consisting of two rings on either side of a bar, given in *M. Soc. Ant. Fr.* LXVII, pp. 268-296

(*A.J.A.* XIII, p. 229). This specimen, which probably came from Egypt, is in the Louvre. The writer modifies his theory that they were terrets so far as to admit that some of the heavier ones may have been used for some other purpose.

Pila Muralia.—As a postscript to his former article on the origin of the Roman *pilum* from the long wooden kitchen pestle (*A.J.A.* XIII, p. 229), G. KROPATSCHECK publishes a real specimen of the latter implement, recently found on the Altenburg in Hessen, the probable site of Tacitus's *Mattium*. (*Jb. Arch. I.* XXIII, 1908, pp. 181-184; fig.)

SPAIN

Prehistoric Chronology of the Iberian Peninsula.—In *R. Arch.* XII, 1908, pp. 390-415 (9 figs.), J. DÉCHELETTE, continuing his discussion of prehistoric chronology in Spain and Portugal (see *A.J.A.* XIII, p. 229), treats of the Iron Age. The limits of the first Iron Age are fixed provisionally between 600 and 400 B.C. The second Iron Age, corresponding chronologically to the epochs of La Tène I and II, extend from 400 to 133 B.C., the date of the capture of Numantia by Scipio Aemilianus. Monuments of the time of transition from the Bronze Age to the Iron Age are lacking. The Iron Age seems to be ushered in by a Celtic invasion, for the arms, fibulae, and other objects of the early Iron Age resemble closely the protohistoric objects found in Celtic countries. In spite of Punic objects found in the tombs of Villaricos (second Iron Age), the population of the region was probably Celto-Iberian, strongly influenced by Punic culture. The statues from Cerros de los Santos and the bust from Elche are regarded as Spanish works of Graeco-Phoenician style. *Ibid.* XIII, 1909, pp. 15-38 (7 figs.), monuments of the second Iron Age are discussed. Objects found at Briteiros, Sabroso, and Ancona, in northern Portugal, which have been compared with "Mycenaean" works, are really provincial productions of Roman, or possibly even later, times, though the early occupation of these sites is not denied.

Topographical Problems.—In *Bonn. Jb.* 118, 1909, pp. 17-33 (fig.), A. FRICKENHAUS argues, on the basis of the pottery, that the Greek colony of Emporion (Ampurias) in Spain was founded about the middle of the sixth century B.C. The later strata of about 200 B.C. contain an abundance of one kind of Iberian pottery, which can thus be dated. In the second part of his paper he agrees with Dennis that the old Etruscan settlement at Arezzo was not on the site of the Roman town.

FRANCE

The Palace of the Emperor Julian at Paris.—In *R. Ét. Gr.* XXI, 1908, pp. 426-433, L. DE VOS discusses the question where the palace occupied by the emperor Julian at Paris was situated, and concludes, on the basis of a passage in Libanius (ed. Foerster, II, pp. 272-273), that he was driven out of the royal palace by the prefect Florentius, but took refuge in the palace at the Thermae, where he was proclaimed emperor by the soldiers. From here he was escorted to the palace in the city.

The Ancient Aqueducts of Lyons.—In his *Aqueducs antiques de Lyon*, C. GERMAIN DE MONTAUZAN publishes an elaborate monograph on Roman aqueducts, making those of Lyons the basis of his study. He tells what is

known of the history of Lyons in Roman times; then gives accounts of the aqueducts of Mont-d'Or, Craponne, la Brevenne, le Gier, Cordieu, and Miribel; and finally discusses the methods of collecting the water and introducing it into the aqueduct; gradients; siphons; the construction of the aqueduct; the workmen and their tools; reservoirs; methods of distributing the water; maintenance and administration of aqueducts; the laws relating to them; repairs, etc. (*Les aqueducs antiques de Lyon*, par C. Germain de Montauzan. Paris, 1909, E. Leroux. xiii, 439 pp.; 5 plans; 130 figs.)

Bibliography of Gallo-Roman Mosaics of Béarn.—In *R. Ét. Anc.* XI, 1909, pp. 146-166, P. COURTEAULT publishes a bibliography of the Gallo-Roman mosaics in Béarn. Ninety articles, most of which are summarized, are mentioned.

The Inscription of Gélignieux.—In *C. R. Acad. Insc.* 1909, pp. 16-28, J. LOTH undertakes to prove that the words *Tricontis* and *petrudecameto* of the inscription found at Gélignieux (*C.I.L.* XIII, 2494) mean *thirty* and *fourteenth* respectively. He translates the passage "*ad cenam omnibus Tricontis ponendam (denariorum binorum) in perpetuum*), sic ut petrudecameto consumatur," "*pour un repas de deux deniers par tête à servir tous les mois de trente jours, de telle sorte qu'il soit consommé le 14^e jour.*" The calendar of Coligny shows that the months of thirty days were alone of good omen; and the fourteenth day of the month was especially revered. This inscription, together with the calendar of Coligny, proves that the language spoken in the part of Gaul inhabited by the Sequani and the Ambarri was Celtic.

SWITZERLAND

Antiquities in Geneva.—In *R. Arch.* XIII, 1909, pp. 233-249 (pl.; 4 figs.), W. DEONNA discusses several antiquities in the Musée Archéologique at Geneva. The first is a rude work of stone, representing a nude woman lying down, with a small Cupid beside her. It was probably carved in memory of a woman who died in childbirth, or as a votive offering for a favorable delivery. The types of Venus and of Hermaphrodite are discussed. The other objects are bronzes. A statuette of a nude Dionysus, from Chevrier, is the finest bronze in the museum. It is a standing figure, showing in its style a combination of Polyclitan and Praxitelean elements. Other bronzes are: 1. A nude standing Aphrodite (*Vénus pudique*), from Palmyra; 2. A nude kneeling man, apparently about to hurl a stone at an enemy, in style resembling Pergamene work; 3. A mirror case adorned with figures of Dionysus, Eros, and a maenad. The style is not earlier than the third or second century B.C.

Caesar's Fortifications on the Rhone.—In *Cl. Journal*, IV, 1909, pp. 309-320, E. W. MURRAY discusses Caesar's fortifications on the Rhone (*B.G.* I, 8), and concludes, in opposition to Stoffel and others, that they were continuous from Geneva to the Jura.

GERMANY

Metz in Roman Times.—In *Die Saalburg*, April 30, 1909, pp. 305-313 (plan), J. KERN summarizes the results of the investigations into the history of Metz in Roman times published since 1897. About 50 B.C. Metz was the site of a Celtic village defended by stone walls on its southwest side.

It was called by the Romans Divodurum or Divodurum Mediomatricum, and later, Mediomatrici, whence the modern name. It lay at the meeting-place of six important roads, and thus attained commercial, though not political, importance at an early date. The amphitheatre, discovered in 1902, seems to have been built at the beginning of the second century A.D., and to have been destroyed at the end of the third. It could hold about 25,000 persons. In the fourth century a smaller amphitheatre was built near the Moselle, part of the foundations of which still exist. There are remains of four Roman bridges and of an aqueduct. The course of the town walls, built at the beginning of the fourth century, is known with certainty. They contain many fragments from the large amphitheatre, were strengthened by four towers, and inclosed an area 3.1 km. long. Metz was sacked by Attila in 451. Gallic gods, such as Epona, were worshipped along with Roman gods, and in later times Mithra and Isis. The first Christian church was erected about the year 300, in the ruins of the great amphitheatre.

The Roman Fort at Osterburken.—In *Die Saalburg*, December 20, 1908, pp. 293–297, H. ELSTER shows that the addition built to the Roman fort at Osterburken (No. 40 of the “Limes Kastelle”) was the strongest part of the fortification. It was built about 189 A.D., as an inscription shows, and is considerably later than the main work. The whole fort was abandoned about the year 260. The Roman settlement was on the site of the modern town, as numerous remains prove.

The Roman Potters of Rheinzabern.—In *Die Saalburg*, December 20, 1908, pp. 297–301, E. HEUSER gives an account, based upon the excavations of Ludowici, of the colony of Roman potters at Rheinzabern. The settlement was established about the middle of the first century A.D., and continued until about the year 366. A brief report is made of the objects found upon the site.

The Pottery of the Habichtswald.—In *Römisch-Germanisches Korrespondenzblatt*, II, 1909, p. 11, DRAGENDORFF points out that the pottery found in the excavations in the camp in the Habichtswald does not belong to the “Halerner Kochtöpfe.”

AUSTRIA-HUNGARY

Bronze Reliefs from Traismauer.—In *Jh. Oest. Arch. I.* XI, 1909, pp. 229–236 (2 pls.; 6 figs.), R. MÜNSTERBERG discusses the two fragmentary bronze plates found at Traismauer, in 1885, and now in Vienna. They were originally attached to the sides of a pyramid about 0.6 m. high. On one plate at the apex of the triangle is an eagle, below which is Dolichenus with Phrygian cap holding the thunderbolt in his left hand and brandishing what seems to be a hammer in his right. Below, at the left, is the upper part of a diminutive warrior; and at the right a goddess of the same size. In the field are parts of three bulls. The second bronze has the figure of Luna above, between the horns of a crescent; and below a youthful Mars armed with spear and shield, and accompanied by a goose. A bronze plate from Carnuntum of similar style is also published. All three date from 260 to 270 A.D.

The Gold Objects from Dálj.—In *Jh. Oest. Arch. I.* XI, 1909, pp. 259–276 (11 figs.), M. EBERT describes the gold objects found in 1906 by a peasant in a vineyard at Dálj in Slavonia, and now in Berlin. He also dis-

cusses similar finds at Michalkow and Fokoru, and concludes that all these gold ornaments were made in Hungary in the early Iron Age; that some of them are older than others in the same deposit; and that accurate dating is at present impossible. The treasure from Dálj was, perhaps, buried about the middle of the first millennium B.C.

Bronze Vessels from Sissek.—In *Jh. Oest. Arch. I.* XI, 1909, Beiblatt, cols. 117-134 (21 figs.), V. HOFFMILLER describes sixty-nine bronze vessels found at different times at Sissek, the Roman Siscia, thirty-one miles from Agram. There are thirty-nine kettles of three different types, nineteen ladles representing two types, a sifter, an amphora, five jugs of different shapes and part of another, and three vessels for ointment.

GREAT BRITAIN

Romano-British Bronzes from Lamberton Moor.—In *Proc. Soc. Ant. XXII*, 1908, pp. 56-62 (pl.; fig.), R. A. SMITH discusses twenty-two objects of bronze of Romano-British workmanship found at Lamberton Moor, Berwickshire, about sixty years ago. These include culinary utensils, a massive collar, two spiral rings, and three enamelled brooches, one of which has the S shape. The hoard dates from the second century A.D. The brooches are published in colors and a list of the extant brooches of the S form is appended.

A Roman Enamelled Brooch.—In *Proc. Soc. Ant. XXII*, 1908, pp. 12 and 14 (pl.), W. BEMROSE publishes with colored plate a Roman enamelled brooch found near Staley in 1857, and now in his collection. Most of the enamel is a brilliant red made from copper.

Ancient Marbles in Edinburgh.—In *R. Arch. XIII*, 1909, p. 266, SEYMOUR DE RICCI mentions the following ancient marbles in the Edinburgh museum: Torso of Aphrodite (*Venus pudica*), half life size, from the Torrie collection; torso of Dionysus, half life size; statuette of draped Aphrodite, very badly restored; curious statuette of Aphrodite (head and arms wanting), standing with her foot on a dolphin; draped female statuette of very fine style; head of a youth, from Thebes, presented by Sir T. D. Carmichael, a remarkable work, related to the head from Beneventum. The two Attic reliefs formerly at Winton Castle (Michaelis, *Anc. Marbles in Great Britain*, p. 721) are now in the museum at Edinburgh. One, of Roman times, bears the inscription Κλαυδία | ἀφφειν ἐκ Μελιτέων in the pediment, the other, apparently of the third century B.C., has on the plinth the inscription Ἀριστομάχη.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART

GENERAL AND MISCELLANEOUS

The Date of S. Demetrius at Saloniki.—In *R. Arch. XIII*, 1909, pp. 83-101 (fig.), O. TAFRALI discusses the documentary and other evidence for the date of the church and the mosaics of St. Demetrius at Saloniki. He finds that the church was erected in the fifth century under a prefect Leontius, who went after the building of the church to Sirmium. That city was destroyed in 441. Perhaps the prefect was the Leontius of

412 and 413 A.D. (*Codex Theodosianus*, I, p. clxxix). Shortly before 634 A.D. the church was injured, but not destroyed, by fire. The work of restoration was soon begun, but continued some years, certainly into the reign of Constans II (642-668). Some of the existing mosaics antedate the fire.

The Restoration of Byzantine Monuments in Greece. — In *Πρακτικά* for 1907 (published 1908), pp. 129-146 (6 figs.), A. ADAMANTIOU gives an account of the repairs which have been made to various Byzantine monuments in Greece. At Mistra the thirteenth century church of Hagios Theodoros has been carefully restored, and other less important monuments have been repaired so as to preserve them as long as possible. At Daphni the south wall of the church which threatened to fall has been strengthened by iron beams, and other repairs made to other parts of the monastery. A Byzantine museum has been established at Mistra and one is projected for Daphni.

The Christian Celtic Fret. — In *Proc. Soc. Ant.* XXII, 1908, pp. 215-218 (3 figs.), O. M. DALTON discusses the early relations of the Christian Celtic fret, and concludes that its derivation is probably to be sought in the East.

The Horse Brooch. — In *Proc. Soc. Ant.* XXII, 1908, pp. 63-86 (2 pls.; 23 figs.), R. A. SMITH discusses the so-called horse brooch and two Saxon lead circular brooches. He also publishes evidence to connect the flamboyant ornament of pagan Celtic metal work with the spiral ornament of Christian Celtic manuscripts and sculptured stones.

ITALY

Byzantine Paintings in Florence. — A. MUÑOZ discusses three paintings in *Riv. d'Arte*, 1909, pp. 113-120, whose style he recognizes as late Byzantine. The first is the Madonna with Angels in the Uffizi, on the frame of which are depicted sixteen saints with their various attributes. Muñoz assigns it to the fourteenth century. He finds that the portrait of Joseph, patriarch of Constantinople, which is placed above his sarcophagus in S. Maria Novella is the work of a Byzantine, not a Tuscan artist, and that there is a discrepancy between the date on the picture, 1440, and that on the sarcophagus, 1439, the latter being the true date of the patriarch's death, which occurred while he was attending the Greek and Latin council at Ferrara. The third picture considered is the sixteenth century St. John Baptist in the Academy.

S. Pietro in Civate and its Ornament. — A description of S. Pietro in Civate is given in *Monatshefte f. Kunstwiss.* II, 1909, pp. 206-217, by A. FEIGEL. His comments have particularly to do with the ornament employed in the church, which he considers as fundamental evidence for the evolution of North Italian ornament in the eleventh and twelfth centuries, and a connecting link between Byzantine art and Romanesque sculpture in general. The decoration consists of reliefs on cancelli and ciborium and in the crypt, and frescoes on the entrance wall and the entrance vault. The frescoes and sculptures show the influence of Monte Cassino; but the ciborium is obviously a free copy of that of S. Ambrogio in Milan, and thus, dating from about 1100, affords a *terminus ante quem* for dating the latter.

The Genoese Family of Gattilusi. — In a meeting at the British School at Athens, January 22, 1909, F. W. HASLUCK read a paper on his recent visit

to Aenos in Thrace to examine the mediaeval inscriptions and heraldry of the Genoese family of Gattilusi, who held the town from 1384 to 1456. Important corrections must be made in the genealogy of the family as published by Hopf. (*Athen.* February 6, 1909, pp. 173-174.)

Mediaeval Monuments of Messina. — In *Le Musée*, VI, 1909, pp. 43-56 (9 figs.), C. ENLART publishes some notes on the mediaeval monuments of Messina before the earthquake of 1909.

The Excavations in the Cemetery of Priscilla. — In *Le Musée*, V, 1908, pp. 255-260 (2 figs.), O. MARUCCI concludes his article on the excavations in the cemetery of Priscilla (see *A.J.A.* XI, pp. 123, 377; XIII, pp. 234-235). The identification of the tomb of the martyr Crescentius serves as a starting-point for identifying the burial place of Pope Marcellinus, who died in 304. This is shown to be the so-called chapel of the Acilii, which is decorated with marbles and mosaics, is well lighted, and in every way worthy of a pope. This cemetery is now known to be the oldest Christian cemetery in Rome.

The Ionic Capital of S. Lorenzo fuori le Mura. — The Ionic capital in the nave of S. Lorenzo fuori le mura which has figured prominently in the controversy about Sauras and Batrachos, the architects, *à propos* of a passage in Pliny (*N.H.* xxxvi, 42), proves now to be unquestionably mediaeval, and of the same workmanship as the rest of the series in the nave, and also of the capitals of the portico. H. THIERSCH, who furnishes the evidence in *Röm. Mitt.* XXIII, 1908, pp. 153-166 (4 figs.), calls attention, however, to an arabesque relief, with frog and lizard, from the Jupiter temple of the Porticus Octavia. This appears to be preserved only in Piranesi's engraving.

FRANCE

Symbolism of the Smaller North Portal at Charlieu. — In the subordinate portal of the marble entrance to the twelfth-century priory of Charlieu we have on the lintel an allegory of the Synagogue, in the tympanum the wedding at Cana, and on the archivolt the Transfiguration, with the figures of Christ, Moses, Elias, Peter, James, and John. (P. MAYEUR in *R. Art. Chrét.* 1909, pp. 33-35.)

Iconography of the Portal of Ste. Marie at Oloron. — The tympanum of the Romanesque Church at Oloron, Basses Pyrénées, contains the Crucifixion with the customary attendant figures. The equestrian figure which crowns an engaged column to the right represents Constantine, and the figure crouching beneath his horse's hoofs, the forces opposing Christianity. The left half-tympanum contains Solomon enthroned between two lions; the right half-tympanum has a man battling with lions, an allegory of human conflict with sin. (P. MAYEUR, *R. Art. Chrét.* 1909, pp. 23-27.)

The Arcuaturn Opus in the Old Cathedral at Rheims. — The accounts of the reconstruction of the old cathedral at Rheims mention the fact that the Archbishop Adalberon destroyed in 976 an *arcuaturn opus* or *fornix* "near the doors," on which was placed an altar and a font. Various explanations of this curious feature have been given, the one usually accepted considering the *opus* to have been the remnant of an atrium, and outside the church. The COMTE DE LASTEYNE in *C. R. Acad. Insc.* 1909, pp. 228-239, argues that the structure must have been a tribune standing

inside the church at the western end of the nave, and cites examples of similar features in other Carolingian churches.

Romanesque Remains at St. Pons de Thomières. — *Mém. de la Soc. Arch. de Montpellier*, 1908, pp. 194 ff., contains an exhaustive treatment of the history, construction, and ornament of the abbey-church of St. Pons de Thomières, a description of the sculptures in its cloister and of the gates and ramparts of the town, by J. SAHUC. The most interesting portion of the monograph deals with the sculptured capitals of the cloisters, which belong to two separate schools, one of the eleventh century, the other of the twelfth, and allied with the Romanesque school of Languedoc.

The Bible in Mediaeval Sculpture. — G. SAUMER commences, in *R. Art Chrét.* 1909, pp. 146-165, a study of Old Testament iconography in Romanesque and Gothic sculpture, as a supplement to his *Vie du Christ racontée par les imagiers*, published *ibid.* 1905-1908.

SWITZERLAND

Early Mediaeval Art in Switzerland. — Early Mediaeval Art in Switzerland forms the general subject of an article in *Monatshefte f. Kunstwiss.* II, 1909, pp. 117-133, by E. A. STÜCKELBERG. The more important portion of it is devoted to the decoration of the churches of the Virgin and St. Martin at Disentis, both of the eighth century. These are one-aisled basilicas, their outer decorations consisting solely of sunken panels in the apse walls. The interior, however, was richly decorated with painted stucco reliefs. The types of ornament used testify to the mixed character of the monastic population of Disentis. The coiffure and dress of the figures and certain *motifs* of ornament are Irish; the remnants of mosaic, the stucco technique, and the fragments of columns are elements introduced by the Benedictines from Italy; most of the decorative *motifs*, particularly the frequent notched ornament, are of Germanic origin.

GERMANY

The Capitals in the Cathedral at Magdeburg. — *Jb. Preuss. Kunsts.* 1909, pp. 56-80 and 108-138 contains an analysis by R. HAMANN of the style of the capitals in Magdeburg cathedral, tracing the development of the capital-type from the late Romanesque to the late Gothic, the first part of the discussion amounting to a monograph in the development of the mediaeval capital. The latter part of the paper is an attempt to isolate the work of the various sculptors who were employed on the cathedral.

AUSTRIA-HUNGARY

A Moslem Cup at Innsbruck. — There is in the museum at Innsbruck a cup which is the only dated example of Moslem cloisonné enamel of the Middle Ages. It belonged according to the inscription to a Seljuk emir whose reign ended in 1144, and has been cited as an example of Chinese influence on the mediaeval art of western Asia. But no dated example of Chinese cloisonné can be found before the fourteenth century, and the prototypes of the decorations on the Innsbruck cup are nearly all Byzantine.

The cup should, therefore, be considered as good evidence of the influence of Byzantium on the Far East in the early Middle Ages, and particularly as showing that Chinese leaf-ornament is derived from the Byzantine. It is true, however, that Chinese tradition says that cloisonné was introduced into China from Byzantium by Moslems. (O. VON FALKE, *Monatshefte f. Kunstwiss.* II, 1909, pp. 234-241.)

GREAT BRITAIN

A Greek Diptych of the Seventh Century. — In *S. Bibl. Arch.* XXX, 1908, pp. 255-265 (2 pls.), W. E. CRUM publishes a fragmentary diptych of ivory, belonging to Mr. W. Moir Bryce, of Edinburgh, which he bought in Luxor in 1903. The diptych is one of the few ecclesiastical diptychs extant, and no other has a liturgical text similar to this. The contents of the text are discussed, and from the internal evidence, as well as on palaeographic grounds, the date is placed between 623 and 662 A.D.

Early Christian and Byzantine Ivories. — In *Proc. Soc. Ant.* XXII, 1908, pp. 231-238, W. R. LETHBRIDGE discusses and dates a number of early Christian and Byzantine ivories in the British and South Kensington Museums. Some of his conclusions are criticised by O. M. DALTON.

A Relief Representing the Crucifixion. — In *Proc. Soc. Ant.* XXII, 1908, pp. 225-231 (pl.), O. M. DALTON discusses the much-weathered relief representing the crucifixion in St. Dunstan's church, Stepney. He is inclined to think it pre-Norman, although its essential features are equally characteristic of the twelfth century.

A Latten Processional Cross. — In *Proc. Soc. Ant.* XXII, 1908, pp. 41-45 (2 pls.), W. PEARCE publishes a latten processional cross at Lamport, Northamptonshire, which is described in detail by W. H. ST. JOHN HOPE. It is $23\frac{1}{4}$ inches high, including the socket, and is of gilt latten. The arms end in roundels inclosing engraved silver plates representing the lion of St. Mark, the eagle of St. John, the ox of St. Luke, and the angel of St. Matthew. The figure of Christ is silvered, but the hair, crown of thorns, and loin cloth are gilded. On the left is an image of Mary, and on the right one of John, both of them gilded except the faces and hands, which are silvered. The date of the cross is about 1470-1480.

The Chatelaine de Vergy on an Ivory Casket. — K. BOVINSKI, who has offered the latest explanations of Giorgione's *Lovers* in Casa Buonarroti at Florence (see *A.J.A.* XIII, p. 243), by connecting the group with the Burgundian legend of the Chatelaine de Vergy, describes in *Monatshefte f. Kunstwiss.* 1909, pp. 58-63, the scenes on an ivory casket of the fourteenth century, in the Mediaeval Room of the British Museum. These scenes are detailed incidents of the same story.

Two Gilt Copper Panels of the Fourteenth Century. — In *Proc. Soc. Ant.* XXII, 1908, pp. 219-225 (5 figs.), O. M. DALTON discusses two gilt copper panels representing the crucifixion and St. Bartholomew recently acquired by the British Museum. Several other objects in the same style can be cited for comparison, among them the reliquary in the cathedral treasury at Rheims, and two panels in the Bargello at Florence, which he thinks are by the same hand. He sets as the date about the year 1310, and compares the miniatures in two manuscripts of the same period.

RENAISSANCE ART

GENERAL AND MISCELLANEOUS

The Use of the Antique in the Renaissance.—In an article on the antique in the Renaissance in *Monatshefte f. Kunstwiss.* II, 1909, pp. 267-280, G. HÜBNER shows that the Isaac in Brunelleschi's famous relief, and the Amor in Signorelli's Triumph of Chastity (London, National Gallery), are imitated from the kneeling, bound barbarian type in Roman art, probably from such a figure on the Arch of Constantine. The collection of antique statues formed by Cardinal Grimani in the early sixteenth century in like manner furnished models to Raphael. The Fallen Gaul in the Archaeological Museum in Venice, which once formed part of this collection, is the original of a fallen warrior in the Victory of Joshua over the Amorites in the Vatican *Loggie*. The Apollo in the same collection, also now at Venice, was the model for the Apollo in the Flaying of Marsyas (Stanza della Segnatura), and for the Apollo in the Betrothal of Cupid and Psyche in the Farnesina.

The Father of Renaissance Book-ornament.—*Monatshefte f. Kunstwiss.* 1909, pp. 46-57, contains a sketch by L. BAER of the activities of Bernhard, the Augsburg painter, who, through his connection with the Ratdolt press in Venice, exerted great influence upon book-ornament in Italy. His designs, carried back to Germany by Ratdolt, supplanted the late Gothic ornament and opened the era of Renaissance decoration in printed books.

Notes on Italian Medals.—Three Italian models for medals are published in *Burl. Mag.* XV, 1909, pp. 31-35, by G. F. HILL. One bears the bust of Giacomo Negrobboni, a Venetian condottiere who died in 1527; another the portrait of an unknown lady labelled *Barbara Ro(mana?)* with a scene of a hunter and nymphs on the reverse; the third has a head of Antonio Galateo. All three belong to private collections. *Ibid.* pp. 94-98 the same writer publishes five medals, three of which are reproduced for the first time, and two entirely new. The latter are portraits of Angelo Marino Regolo, an unidentified doctor of laws, and of Charles V, and are both ascribed by Hill to Giulio della Torre.

Michelangelo and the Sultan.—F. SAARE, in *Rep. f. K.* XXXII, 1909, pp. 61-66, discusses the letter written to Michelangelo in 1519 by a certain Tommaso di Tolfo in Adrianople, urging him to come East and enter the service of the Sultan. He believes the "art-hating lord," on account of whom, the letter intimates, Michelangelo formerly refused to go to Turkey, is the Sultan Bajazet; and the occasion meant was the first invitation to Turkey which Michelangelo received in 1506, after his flight from Rome, through the medium of some Franciscan monks. The "art-loving lord," whom the letter goes on to mention as now reigning, would thus be Selim I, Bajazet's son and successor. Previous interpretations have identified these "lords" with successive pashas of Adrianople or other Turks of high position.

The Technique of Michelangelo.—Michelangelo's use of models, proved by Gottschenski for his sculptured figures, also extended to his painting, according to an interesting study of the question by the painter O. HETTNER in *Monatshefte f. Kunstwiss.* II, 1909, pp. 71-87 and 134-148. He describes the method still used among draughtsmen for reproducing

flying or hanging figures, of causing the model to lie on his back over a stool or upon a table, and turning the resultant drawing in various ways to suit the composition. The writer then shows that this method was used by Michelangelo for many figures of the Sistine Chapel, notably: the "Haman" with regard to which he shows that, viewed with reference to this method of using the model, the drawings in the Malcolm and Teyler collections can no longer be suspected; two of the angels with Persian symbols; a number of figures in the compositions of the ceiling; and the group of "Charon's boat" in the Last Judgment. The same use of the model is found in Signorelli's The Damned at Orvieto, and a further application of this method of analysis of technique proves to the writer that the Ganymede in the Hofmuseum at Vienna is a copy after the original sketch for one of the boy-angels in the Parma cupola, and not from the hand of Correggio himself.

ITALY

Antonello da Messina. — *Gaz. B.-A.* XLI, 1909, pp. 34-51, contains a *résumé* of the life and work of Antonello da Messina chiefly based on the recent discovery of the main facts in his life, by La Corte-Cailler and Di Marzo. The writer, H. STEIN, points out that several pictures bearing the name of Antonello are to be assigned to Antonello da Saliba, Antonello's nephew and pupil, and that at least two epochs are to be recognized in the artist's career: the first, when he painted religious subjects exclusively, and the second colored by his visit to Venice. The Flemish influence in Antonello's work cannot, on chronological grounds, be accounted for by making him a pupil of Jan Van Eyck as Vasari does, and is best explained on the theory of some Spanish intermediary.

Borgognone's Periods. — In his study of the evolution of Borgognone's style in *L'Arte*, 1909, pp. 51-62 and 108-118, G. ZAPPA distinguishes four periods. The first is represented by the large Madonna and Saints in the Brera, and shows close adherence to the art of Vincenzo Foppa, and the additional influence of Butinone. The independent creations of his second period are obviously the result of the busy years spent in the decoration of the Certosa at Pavia, whither he was called in 1488. This second phase, the "gray period," is marked by the rejection of gold from his color vocabulary and angular folds in draperies, contrasting with the severe parallelism of his first works. One of the earliest products of this phase is the Crucifixion in the Church of the Certosa at Parma, dated 1490, and the last picture painted in this manner is the Descent of the Holy Ghost in the Santo Spirito at Bergamo, dating after 1508. The severe repression of tone which characterizes the "gray period" is cast off in the third phase, which is one of deep and vigorous color, as well as of a freer treatment of drapery. This phase is well represented by the four paintings in the Incoronata at Lodi. Already in the third phase, the influence of Leonardo can be detected, and this is the distinguishing characteristic of the final period, in which Borgognone resigns himself, but with much more reserve than the other Lombards, to the more developed naturalism introduced by the Florentine master.

Tommaso Malvito da Como. — Tommaso Malvito da Como and his son Giovanni Tommaso are the subjects of the first paper in a series of 'Studies

in the Neapolitan Sculpture of the Renaissance' by A. MUÑOZ. (*Boll. Arte*, III, 1909, pp. 55-73 and 83-101.) The writer points out the importance of the chapel of St. Lazare in the old cathedral at Marseilles, as a good example of the pre-Neapolitan period of Tommaso Malito. Of the sculptures of this chapel, in which the sculptor collaborated with Francesco Laurana, Muñoz assigns to him the decoration of the pilasters and the column, the tabernacle and sarcophagus under the arch to the right, and the statue of St. Lazare. The rest of the article describes the activity of Tommaso and his son at Naples, making known, among other things, the original design for the monument of Antonio d' Alessandro in the church of Monteoliveto at Naples. The style of Tommaso is also analyzed, and characterized as that of a decorator rather than that of a figure-sculptor. The article closes with a chronological list of Tommaso's works, a sketch of the work of his son, and an appendix of documents.

Portraits by Salviati. — C. GAMBA, in *Rass. d' Arte*, IX, 1909, pp. 4-5, discusses the real authorship of four portraits contained respectively in the Colonna Gallery at Rome, the Pinacoteca at Naples, and the Pitti gallery and the collection of the Marchese Carlo Niccolini at Florence. Through the resemblance of the Colonna portrait to a figure in Salviati's frescoes in the Palazzo Farnese, and the likeness of both to Salviati's own features, the writer concludes that the Colonna picture is the painter's own portrait by himself, although it was hitherto attributed to Girolamo da Treviso. The Naples picture also belongs to him, although once ascribed to Raphael, and Salviati's style is to be found in the Pitti portrait, attributed to Schiavone, and the Niccolini portrait, attributed to Bronzino.

Attributions to Antoniazio Romano. — A work of Antoniazio's early period, when he still betrays the influence of Benozzo Gozzoli, is a triptych at Rieti, containing the Madonna in the central panel and Sts. Francis and Anthony on either wing. The same manner is found in a triptych in S. Maria Maggiore at Tivoli, and in still another in S. Francesco at Subiaco. All of these works, however, show the strengthening influence on Roman painting of Melozzo da Forlì, and some connection with the Umbrian school. A Madonna, signed *Antonius pinxit 1494*, which was formerly in S. Salvatore Lauro in Rome and now is in the Collegio Piceno, is certainly a work of Antoniazio's, although hitherto given to Antonio Pollaiuolo. Other works of his are: the Madonna and Saints in the Pantheon which passes under the name of Perugino; a frescoed Annunciation recently discovered in the same building; a Madonna and Saints in a chapel of SS. Giovanni e Paolo, and a fresco in S. Saba representing the Annunciation. (G. BERNARDINI in *Rass. d' Arte*, IX, 1909, pp. 43-47.)

A Follower of Paolo Uccello. — C. GAMBA has discovered in a Lives of Monastic Saints in the Uffizi magazines and a Nativity with Saints in the gallery at Karlsruhe, two works of a follower of Paolo Uccello, imitating the master in superficial features, but endowed with a quieter spirit, and with much less of the naturalistic experimenter than is found in Paolo. (*Riv. d' Arte*, 1909, pp. 19-30.)

The New "Leonardo" at Milan. — The picture recently displayed by a dealer in Milan and hailed by the Italian newspapers as the portrait by Leonardo once in the Settala collection, is a half-figure of a nude woman resembling Leonardo's well-known drawing at Chantilly. F. MALAGUZZI

VALERI discusses the new picture in *Rass. d' Arte*, March, 1909, pp. ii-iii, and pronounces it a late work based on the Chantilly cartoon. H. COOK, in *Burl. Mag.* XV, 1909, pp. 108-113, enumerates nine other versions of Leonardo's original conception, and the same number of the periodical publishes an interesting wax bust in the collection of Mr. Murray Marks, which bears some resemblance to the so-called Settala "Leonardo."

New Pictures by Lorenzo Monaco. — OSWALD SIRÉN, in *Rass. d' Arte*, IX, 1909, pp. 33-36, adds a number of pictures to the catalogue of Lorenzo's works included in the monograph upon that artist which he recently published. Two of these large frescoes in the *Archivio Notarile* at Florence belong to the same series as the frescoes in the adjoining *Chiostro delle Oblate*. On the basis of the two new frescoes, which represent the Nativity and Adoration, the writer is inclined to date the whole series later than 1396, the date proposed in his book. The central panel of a tabernacle in the Uffizi magazines, representing the Madonna with six saints, is also by Lorenzo, but the wings were painted by Giovanni da Ponte. A predella in the same place, seen at Vallombrosa by Crowe and Cavalcaselle and by them ascribed to Lorenzo Ulmaio, is accepted with some hesitation by Sirén. It represents St. Francis receiving the Stigmata and St. Nicholas saving the ship. The other attributions are: a small Crucifixion in the Ferroni collection in Florence; another Crucifixion belonging to Mr. Herbert P. Horne; an Annunciation in the Fornari collection at Fabriano (also described by B. BERENSON in *Riv. d' Arte*, 1909, pp. 1-6); a Madonna in the Spiridon collection at Paris; and a Madonna in Mr. Johnson's gallery in Philadelphia.

New Works by Leonbruno. — New works by Leonbruno are: an allegorical painting in the Grandi collection at Milan of an armored warrior kneeling and bending over a sleeping nymph; and two pen drawings of classic character, one in the Loeser collection at Milan, the other in the collection of Prince Dolgoroukoff in Moscow. All these are attributed to Leonbruno on internal evidence by C. GAMBA in *Rass. d' Arte*, IX, 1909, pp. 30-31. The Warrior and Nymph in the Grandi collection has been bought by the Uffizi. (*Riv. d' Arte*, 1909, p. 141.)

Frescoes in S. Giovanni a Carbonara in Naples. — The frescoes in the round chapel of Gianni Caracciolo in the church of S. Giovanni a Carbonara are the subject of a study by L. SERRA in *Boll. Arte*, III, 1909, pp. 121-136. They consist of two series, one devoted to the "Life of the Anchorites," the other to the "History of the Virgin." The artist who signed the first series was Perrinetto da Benevento. The Virgin-series is signed by Leonardo da Bisuccio, concerning the origin of whose style critics differ widely. Serra compares the Naples frescoes with the series of the Life of Theodelinda in the cathedral at Monza, and decides that Leonardo must have learned his art from these.

Donatello's Altar in the Santo at Padua. — D. VON HADELN, in *Jb. Preuss. Kunsts.* XXX, 1909, pp. 35-55, offers a new reconstruction of the high-altar in the Santo, based on the documents, Marcanton, Michiel's description, the remaining fragments, and the novel assumption that Mantegna's altar-piece in S. Zeno is imitated from Donatello's work. From these he reconstructs an altar in the form of a loggia with four free-standing columns, on whose pedestals are arranged the twelve reliefs of music-making putti still existing in the church. The statues are all free-stand-

ing within the loggia, in the centre the Madonna flanked by Sts. Francis and Anthony; on the left Sts. Justina and Louis of Toulouse, on the right Sts. Prodocimus and Daniel. On the central panel of the front of the podium appeared the Pietà, to right and left the arms of Francesco da Tergola, the donor, then two reliefs representing miracles of St. Anthony, corresponding to two others on the rear face of the podium. On the corner panels in front and rear were placed the reliefs of the evangelistic symbols.

The Author of a Triumph of Death, at Palermo.—The fresco of the Triumph of Death in the Palazzo Sclafani at Palermo has usually been ascribed to a Flemish artist, aided by a local painter. L. OZZOLA, in *Monatshefte f. Kunstwiss.* II, 1909, pp. 198–205, brings evidence to show that the real author of the painting is the Spaniard Jaime Huguet, or some painter of the Catalan school very closely connected with him.

Sansovino's Work in the Castaldia at Ponte Casale.—An article in *Rass. d'Arte*, IX, 1909, pp. 48–50, by LAURA PITTONI, describes the decorations of the castle built for the Garzani of Venice by Jacopo Sansovino on the estate which bears the name of La Castaldia. The sculptor's name is signed upon the two caryatids which adorn the fireplace in the dining hall, and he, and not an assistant, probably did the figures on the fireplace in the *Sala degli Affreschi*. The writer points out that in addition to the two large papier-maché reliefs at Berlin and the Louvre, representing the Virgin and Child, a third example, signed by Sansovino, exists in the *archivio* of the hospital of Serravalle Vittoria. Upon comparison with these works, a relief of the same subject in the Villa of the Castaldia proves clearly to be a work of Sansovino and one of his best.

Pictures in the Borghese Gallery in Rome.—L. VENTURI contributes to *L'Arte*, 1909, pp. 31–56, a discussion of some of the late pictures in the Borghese gallery. He notes the imitation of Sebastiano del Piombo to be seen in two female portraits by Bronzino, assigns the Callisto (No. 304) to Dosso Dossi rather than to Battista; traces the type used in the "Astolfo with the giant's head" through a number of other warrior-heads by Dosso and his imitators; discovers the subject of No. 225 in the story of Candaules, king of Lydia, recounted by Herodotus (I, 8–10); assigns the St. John Baptist (No. 267) to Michelangelo da Caravaggio, and the Flagellation, No. 410, to Calvaert.

Jesus at the House of Zebedee.—In *R. Arch.* XIII, 1909, pp. 120–122, JEANNE CUÉNOD calls attention to a picture in the Borghese gallery in Rome, which is called "Jesus in the House of Zebedee." It has been attributed to each of three Venetian artists named Bonifazio, who are now known to be but one man, Bonifazio Pitati da Verona. In the picture Jesus is represented seated on a marble throne in a superb palace; at his feet is Mary begging his favor and pointing to her sons John and James; at the left are Zebedee and four disciples. The source of this representation is the *Acts of St. James*, a work of about the end of the eighth century (translated and published by J. Ebersolt, Paris, 1902).

False Documents.—An article by P. Giordani in *L'Arte*, 1907, p. 273, entitled 'Studi sulla scultura romana del quattrocento,' has called forth much criticism of the documentary evidence which its author employed. A brief discussion of this documentary evidence is contributed to *Rep. f. K.* XXXI, 1909, pp. 55–60, by G. DE NICOLA, who sums up his conclusions with the

words: "His (Giordani's) documents are either already edited, or unable to be found for lack of references, or lost some time ago, or are false, by the evidence of facts and documents that contradict them."

Maffeo Olivieri.—The sculptor in small bronze-work, Maffeo Olivieri, has hitherto been known merely by the appearance of his signature on two bronze candlesticks in S. Marco in Venice. Similarity in style between the figures on these candlesticks and certain other works now enable us to add materially to his *œuvre*. The statuettes thus to be assigned to Olivieri are: an Adam in the Kaiser Friedrich Museum at Berlin; three dancing-girls, one in the Louvre, another in the Musée de Cluny, and a third in the Bischoffsheim collection at Paris; and a Dancing Faun belonging to M. Gustave Dreyfus in Paris. (W. BODE in *Jb. Preuss. Kunsts.* XXX, 1909, pp. 81-88.)

Notes on Alessandro Vittoria.—In *L'Arte*, 1909, pp. 65-68, G. LORENZETTI contributes documentary evidence which shows that the jealousy on the part of Sansovino was the cause of Alessandro's sudden departure from his master's *bottega* in 1551, and that Sansovino in all probability invited him back in 1553 to carve the caryatids of the Libreria. The Mercury on the façade of the Libreria is not by Alessandro Vittoria.

The Pseudo-Boccaccino.—In the first of a series of articles on Lombard artists who worked in the Veneto, G. FOGOLARI describes the work of the pseudo-Boccaccino, and assigns to him two new paintings, one a Madonna with Donor in the church of S. Lazaro degli Armeni in Venice, the other a Madonna in the little church of S. Niccolo at Bribano. (*Rass. d'Arte*, IX, 1909, pp. 61-64.)

FRANCE

"Jehan Cousin."—M. ROY, in *C. R. Acad. Insc.* 1901, pp. 102-107, unravels the mystery of the life of the artist Jehan Cousin, long a puzzle to critics on account of the wide diversity in the dates of his works, and his extraordinarily long career as an active artist. He finds that instead of one artist, there were two, Jehan Cousin senior and his son of the same name. The elder was born about 1490, became wealthy, and worked at his art for the most part only as a designer, leaving the execution to others. He died, at the latest, in 1561. Jehan Cousin junior was born about 1522, and it was he who did the drawings for the "Book of Fortune" and was the author of the *Livre de Pourtraicture*.

The Identification of Titian's Model for the Portrait of Isabella of Portugal.—The portrait by an artist *di trivial penello*, as Aretino calls him, which Charles V gave Titian as the basis for his likeness of the Empress Isabella of Portugal is identified by ROBLOT DE LONDRE, in *Gaz. B.-A.* XLI, 1909, pp. 436-454, with the portrait in the Roblot collection at Paris which he assigns to the Spaniard Alonzo Sanchez Coello. The article includes a discussion of the life, works and art of this little-known painter, and proves that Leone Leoni's medal of the Empress, as well as P. de Jode's woodcut likeness of her, are taken from Coello, and not from Titian.

Notes on Drawings in the Louvre.—No. 32, a figure of St. John, attributed to Andrea del Sarto, is a youthful study by Pontormo, apparently for the fresco of the Visitation in the Annunziata cloister in Florence. No. 1365, a design for a tomb, assigned to the Florentine school of the

fifteenth century, is a study by Leonardo del Tasso for the sepulchre of his own family, which stands to-day, a fairly accurate copy of the drawing, in the church of St. Ambrose in Florence. No. 66, groups of women and men, assigned to Giorgione, is very probably by Pordenone. The allegory, No. 8 of the *Collection His de La Salle*, which is given to Botticelli, is rather from the hand of Francesco di Giorgio. (CARLO GAMBA in *Rass. d'Arte*, IX, 1909, pp. 37-40.)

HOLLAND

The Collection of Dr. Hofstede de Groot at Rotterdam.—The collection of Dr. Hofstede de Groot, recently exhibited in the Boymans Museum in Rotterdam, is discussed by K. FRIESE in *Monatshefte f. Kunstwiss.* II, 1909, pp. 22-37. The pictures upon which he comments are: Portrait of an Old Man by Karel Fabritius, the original from which J. Stolk drew his pretended portrait of Roemer Visscher; landscapes by Hercules Segers, Jacob van Ruisdael, Jan van Goyen; an interior Maiden with Cavaliers by Pieter de Hooch; an interior by Jacobus Vrel; a Young Scholar in His Study by Gerrit Dow; a Tavern Scene by Jan Steen; a Quartette by N. de Giselaer; a drawing of two bound prisoners by Rubens; a Still Life by Jan Fyt; and the Portrait of a Boy by Michiel Sweerts.

GERMANY

The Master of the Blaubeurer Altar.—In *Monatshefte f. Kunstwiss.* II, 1909, pp. 11-21, W. VÖGE discusses the authorship of a wooden polychrome Madonna of the Misericordia type, who shelters under her mantle a number of kneeling Carmelite monks. This statue, which is in the Kaiser Friedrich Museum, is by the same hand which carved a somewhat similar Madonna in the Maximilians-Museum at Augsburg, and the Blaubeurer Altar. He belonged to the same school which produced Tilmann Riemenschneider.

The Home of the Master D. S.—In *Rep. f. K.* XXXII, 1909, pp. 160-171, P. KRISTELLER publishes two woodcuts showing the dependence of Johannes Wechtlin upon this master, points out his close relationship to Burgkmair, and suggests his Swabian origin.

A Copy of Holbein from Moderno.—Holbein the Elder's Fall of Phaethon, a drawing in the Berlin Kupferstichkabinett, is a faithful copy from Moderno's bronze plaque with the same subject in the Berlin museum. Other cases of such copying of works of minor sculpture on the part of Holbein can be cited, and in particular the head of Pilate, which is constantly used in Holbein's Passion pictures about 1500, and is copied from Pisanello's medal of the Eastern Emperor John VIII Palaeologus. (C. GLASER in *Monatshefte f. Kunstwiss.* II, 1909, pp. 314-316.)

RUSSIA

The Crucifixion in the Hermitage at St. Petersburg.—*L'Arte*, 1909, pp. 119-132, contains an article by A. NEKUSTROÏEFF upon the crucifixion in the Hermitage at St. Petersburg in which the writer, after a careful analysis of the documentary and internal evidence, concludes that the picture is not an early work of Raphael's, but belongs to Perugino's middle period, dating between the years 1490 and 1495.

GREAT BRITAIN

Beauneven's Sketch Book.—ROGER FRY, in *Burl. Mag.* XV, 1909, pp. 73-75, in the course of an article on 'Early English Portraiture' at the Burlington exhibit, reiterates his faith in the authenticity of Mr. J. P. Morgan's Beauneven sketch book, on the ground that the book was mentioned and attributed to Giotto as early as 1840 in Rosini's *Storia della Pittura*, for a forgery of Beauneven's style would scarcely have been possible then. (See *A.J.A.* XI, p. 126.)

UNITED STATES

The Descent from the Cross in the Jarves Collection at New Haven.—In *Burl. Mag.* XV, 1909, p. 197, O. SIRÉN describes the Descent from the Cross in the Jarves collection at New Haven and assigns it to Cecco di Pietro, in contradiction to Crowe and Cavalcaselle's attribution to Antonio Veneziano.

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